Appendix C

The suppliers offer

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# Introduction

## Background and scope

The Danish Defence Acquisition and Logistics Organisation is requesting tenders for a number of different oils, lubricants and related special products, with the aim of awarding a four-year Framework Agreements for the supply of said products.

The products are used in numerous applications related to the maintenance of the Danish Defence’s assets, encompassing motor vehicles, aircraft, naval vessels, radar facilities, etc.   
Some products are requested in several packaging sizes, whereas others are only requested in one specified packaging size. The tender covers both packed goods and bulk delivery of oils, lubricants and related special products.

## Product descriptions

Approximately half of the requested products in this tender are lubricants or special products which have been standardized by the North Atlantic Treaty Organization (NATO) in order to increase interoperability between member nations. NATO standardized lubricants and associated products are identified by a NATO Code Number (e.g. “C-620”).

The other half of the products requested in this tender, which are not associated with a NATO Code Number, are instead referred to by a code of the format XX-YYYY (i.e. two letters followed by four digits, e.g. “MG-3007”), which is a designation used by the Danish Defence Acquisition and Logistics Organisation (henceforth referred to as “DALO”) to categorise oils, lubricants and related special products.   
In the following, “Product Designation” is used as a collective name, serving as a reference to a product specification defining a product. Such a product may be required in more than one packaging size.

This requirements specification states a range of requirements that are common for all the requested products, requirements which only apply to products with a NATO Code Number, requirements which only apply to products without a NATO Code Number, as well as sets of requirements that pertain only to the individual Product Designations.

The Product Designations (along with their descriptions), which are requested in this tender, are listed below.

|  |  |
| --- | --- |
| **NATO-code** | **Description** |
| C-634 | Corrosion preventive compound, water displacing |
| C-635 | Corrosion preventive oil, hydraulic system |
| C-642 | Lubricating oil, engine preservative, grade 30 |
| G-353 | Grease, aircraft, synthetic, molybdenum disulphide |
| G-354 | Grease, aircraft, synthetic, extreme pressure, type 1, Li based |
| G-355 | Grease, aircraft, graphite |
| G-363 | Grease, plug valve, hydrocarbon resistant |
| G-366 | Grease, aircraft, helicopter oscillating bearing |
| G-372 | Grease, aircraft, synthetic, high temperature |
| G-392 | Grease, aircraft, synthetic, pneumatic system |
| G-395 | Grease, aircraft, multipurpose |
| G-398 | Grease, perfluorinated liquid, oxygen compatible |
| G-450 | Grease, naval general purpose, ball and roller bearing |
| G-460 | Grease, sea water resistant |
| G-1350 | Grease, perfluorinated liquid, oxygen compatible |
| H-515 | Hydraulic fluid, petroleum, superclean |
| H-537 | Hydraulic fluid, synthetic hydrocarbon |
| H-538 | Hydraulic fluid, low temperature, synthetic |
| H-540 | Hydraulic fluid, petroleum |
| H-542 | Brake fluid, automotive, borate ester based |
| H-544 | Hydraulic fluid, synthetic, less flammable |
| H-547 | Brake fluid, synthetic, silicone |
| H-575 | Hydraulic fluid, petroleum, ordnance |
| O-133 | Lubricating oil, aircraft turbine engine, petroleum |
| O-142 | Lubricating oil, general purpose low temperature |
| O-148 | Lubricating oil, aircraft turbine engine, synthetic 3 cSt |
| O-149 | Lubricating oil, aircraft turbine engine, synthetic 7.5 cSt |
| O-152 | Lubricating oil, aircraft turbine engine, synth, 5 cSt C/I |
| O-153 | Lubricating oil, gear aircraft light grade |
| O-154 | Lubricating oil, aircraft turbine engine, synth, 5 cSt HTS |
| O-156 | Lubricating oil, aircraft turbine engine, synthetic 5 cSt |
| O-158 | Lubricating oil, semi-fluid |
| O-160 | Lubricating oil, aircraft turbine engine, synthetic 5 cSt |
| O-190 | Lubricating oil, genereal purpose preservative light |
| O-226 | Lubricating oil, gear extreme pressure, grade 80W-90 |
| O-228 | Lubricating oil, gear extreme pressure, grade 85W-140 |
| O-236 | Lubricating oil, engine severe duty, diesel and gasoline service, 15W-40 |
| O-237 | Lubricating oil, engine severe duty, diesel service, grade 10W |
| O-238 | Lubricating oil, engine severe duty, diesel service, grade 30 |
| O-1178 | Lubricating oil, heavy duty engine, multigrade 5W-30 |
| O-1179 | Lubricating oil, engine, multigrade 5W-40 |
| S-720 | Anti-seize compound, aircraft, graphite petrolatum |
| S-722 | Anti-seize compound, molybdenum disulphide |
| S-736 | Silicone compound, electrical, insulating |
| S-737 | Isopropanol, technical |
| S-743 | Petrolatum, technical |
| S-749 | Lubricant, solid film, air drying |
| S-756 | Insulating oil, electrical |
| S-1720 | Damping fluid, dimethyl silicone 100 cSt |
| S-1735 | Molybdenum disulphide lubricating oil, silicone base |

|  |  |
| --- | --- |
| **DALO product designation** | **Description** |
| MG-3007 | Grease, multipurpose, extreme pressure, NLGI 1 |
| MG-3008 | Grease, multipurpose, extreme pressure, NLGI 2 |
| MG-3011 | Grease, multipurpose, molybdenum disulphide, NLGI 2 |
| MG-3023 | Grease, multipurpose, extreme pressure, NLGI 3 |
| MG-3078 | Grease, aircraft, synthetic, extreme pressure, type 2, clay based |
| MG-3083 | Grease, aircraft, synthetic, wide temperature, Li based |
| MH-4000 | Hydraulic oil, mineral, zink antiwear, ISO VG 15 |
| MH-4001 | Hydraulic oil, mineral, zink antiwear, ISO VG 32 |
| MH-4002 | Hydraulic oil, mineral, zink antiwear, ISO VG 46 |
| MH-4003 | Hydraulic oil, mineral, zink antiwear, ISO VG 68 |
| MH-4004 | Hydraulic oil, mineral, zink antiwear, ISO VG 100 |
| MH-4005 | Hydraulic oil, mineral, zink antiwear, ISO VG 22 |
| MH-4007 | Hydraulic oil, mineral, ashless, ISO VG 100 |
| MH-4014 | Hydraulic oil, biodegradable, ISO VG 46 |
| MH-4021 | Hydraulic oil, mineral, high VI, ISO VG 32 |
| MH-4022 | Environmentally Acceptable Lubricant ISO VG 68, stabs & hydraulics |
| MO-2001 | Lubricating oil, aircraft, piston engine, SAE 15W-50 |
| MO-2002 | Lubricating oil, engine, SAE 10W-40 |
| MO-2008 | Lubricating oil, engine, Detroit Diesel two-stroke, SAE 40 |
| MO-2009 | Lubricating oil, engine, marine, high dispersancy, SAE 30 |
| MO-2010 | Lubricating oil, engine, SAE 15W-40 |
| MO-2014 | Lubricating oil, engine MTU 8000-series, SAE 30 |
| MO-2017 | Lubricating oil, engine, marine, SAE 40 |
| MO-2018 | Lubricating oil, engine severe duty, diesel service, SAE 40 |
| MO-2020 | Lubricating oil, engine, synthetic, SAE 0W-30 |
| MO-2021 | Lubricating oil, engine, synthetic, SAE 10W-40 |
| MO-2022 | Lubricating oil, engine, synthetic, SAE 5W-30 |
| MO-2024 | Lubricating oil, engine, ACEA E9, SAE 15W-40 |
| MO-2033 | Lubricating oil, engine, Ford WSS-M2C 913B, SAE 5W-30 |
| MO-2034 | Lubricating oil, engine, CAT ECF-3, SAE 10W-30 |
| MO-2040 | Lubricating oil, engine, synthetic, SAE 5W-30 |
| MO-2102 | Lubricating oil, gear, API GL-4, SAE 80W-90 |
| MO-2103 | Lubricating oil, gear, synthetic, API GL-5, SAE 75W-90 |
| MO-2104 | Automatic Transmission Fluid, Dexron III |
| MO-2105 | Lubricating oil, gear, extreme pressure, ISO VG 68 |
| MO-2106 | Lubricating oil, gear, extreme pressure, ISO VG 150 |
| MO-2108 | Lubricating oil, gear, extreme pressure, ISO VG 320 |
| MO-2110 | Lubricating oil, gear, extreme pressure, ISO VG 680 |
| MO-2114 | Lubricating oil, gear, limited-slip, API GL-5, SAE 80W-90 / 85W-90 |
| MO-2115 | Lubricating oil, gear, extreme pressure, ISO VG 100 |
| MO-2119 | Transmission fluid, off-highway, Allison TES 353 |
| MO-2121 | Universal Tractor Transmission Oil (UTTO) |
| MO-2123 | Automatic Transmission Fluid, MB 236.14 |
| MO-2127 | Transmission oil for construction equipment, SAE 50 |
| MO-2129 | Lubricating oil, engine, marine, SAE 30 |
| MO-2136 | Transmission oil, CAT TO-4, SAE 10W |
| MO-2137 | Transmission oil, CAT TO-4, SAE 30 |
| MO-2139 | Lubricating oil, gear, MB 235.11, SAE 75W-90 |
| MO-2140 | Automatic Transmission Fluid, Allison TES 295 |
| MO-2146 | Environmentally Acceptable Lubricant ISO VG 68, thrusters |
| MO-2148 | Lubricating oil, gear, SAE 75W-140, STO 2:0A |
| MO-2200 | Lubricating oil, air compressor, ISO VG 32 |
| MO-2201 | Lubricating oil, air compressor, ISO VG 46 |
| MO-2202 | Lubricating oil, air compressor, ISO VG 68 |
| MO-2211 | Lubricating oil, air compressor, ISO VG 100 |
| MO-2300 | Lubricating oil, biodegradable, chain saw |
| MO-2310 | Heat transfer oil |
| MO-2342 | Environmentally Acceptable Lubricant ISO VG 100, Stern Tube |
| MS-6000 | Windscreen washer fluid |
| MS-6001 | Engine coolant concentrate (anti-freeze) |
| MS-6050 | Engine coolant concentrate (anti-freeze), OAT |

## Definitions and abbreviations

In this chapter definitions used in this requirement specification are described.

Classification

The following categories are valid for the ’Classification’ column, cf. the tables in section 2 below. Each requirement is classified as either ‘Mandatory Requirement’ or ‘Conditional requirement’. Mandatory Requirements are marked with ‘**M**’. Conditional requirements are marked with ‘R’.

| Classification  ID | Description |
| --- | --- |
| **M** | A mandatory requirement shall be fulfilled by the tenderer. If a mandatory requirement is not fulfilled, the offer will be excluded from further evaluation |
| R | A conditional requirement should be fulfilled by the tenderer. These requirements will be evaluated by the Danish Defence |

Documentation

The following categories are valid for the ’Documentation’ column, cf. the tables in section 2 below. Please notice that it is possible to specify more than one documentation requirement.

| Documentation  ID | Description |
| --- | --- |
| Y/N | Tenderer must answer with Y (yes) if the requirement is fulfilled or N (no) if the requirement is not fulfilled. If necessary with comments.  Please observe that if a requirement is a Mandatory Requirement answering ‘No’ results in an unconditional offer. The offer will also be deemed unconditional if any comments given by the tenderer raises doubts as to whether one or more Mandatory requirements are fulfilled. |
| DS | The offer must include a description. |
| DC | The offer must include enclosed documentation |

References to technical specifications and standards

This document contains requirements that include references to technical specifications, such as an ISO standard or a MIL-spec. DALO has attached the words "or equivalent" to all such technical specifications where it is relevant. If the offer does not comply with all standards specified by DALO, the tenderer must provide information in Danish or English establishing that the standard used in the offer is equivalent to the standard specified by DALO.

Where reference is made to a standard or technical specification without explicitly stating the version or version number, the newest version applies.

Useful links for access to referenced military or defence specifications

* United States MIL-specifications (e.g. MIL-PRF-16173E) may be obtained through the following URL: <https://quicksearch.dla.mil>
* BAAINBw Technical Specifications (TL) (e.g. TL 9150-0035) may be obtained through the following URL: [tl.baainbw.de/AG-Bund/TL/ML-Suche\_TL.asp](file:///\\FORSVARET.FIIN.DK\DFS\FMI\VER\P\1\FMI-LU-VF03\Rammeaftaler\Olier,%20smøremidler%20og%20specialprodukter\2022\tl.baainbw.de\AG-Bund\TL\ML-Suche_TL.asp)
* French DCSEA specifications may be obtained through the following URL: <http://www.defense.gouv.fr/energie-ops/produits/specifications-et-fiches-de-donnees-de-securite/specifications-et-fiches-de-donnees-de-securite>
* UK Ministry of Defence DEF STAN specifications may be obtained through the following URL: <https://www.gov.uk/guidance/uk-defence-standardization>   
  The user is prompted to create an account for access.

# Requirements

## General requirements (applies to all products)

All the products that the Tenderer offers as part of this tender shall comply with the following general requirements.

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Technical support** |  |  |  |  |  |
| 2.1.a | The Supplier shall offer technical support in Danish or English by phone and email within normal business opening hours, free of charge.  If the Supplier does not possess the technical expertise required, the Supplier shall facilitate that the Buyer can receive the technical support from the product manufacturer instead, still free of charge. | **M** | Y/N | In this regard, technical support shall as a minimum cover advice on product selection for a given application, provision of technical information (including product data sheets) and product approval status, aid in diagnosis and resolution of technical issues involving products supplied by the Supplier within the Framework Agreement, as well as questions of order status, product availability, packaging and labelling. |  |  |
|  | **Legal obligations, Packaging and labelling, as well as Human Health and Environmental Hazards** |  |  |  |  |  |
| 2.1.b | The Supplier shall comply with any legal requirements for the marking of containers. | **M** | Y/N |  |  |  |
| 2.1.c | All markings are to be clearly and legibly inscribed, of a font size appropriate for the type of container, and the materials used are to be selected for durability. Any adhesive labels used for marking are to be resistant to water and to the packed product. | **M** | Y/N |  |  |  |
| 2.1.d | The container construction material shall be compatible with the product. Any internal protective coating shall be resistant to the product and to water and must not have a detrimental effect on the product.  Internally galvanized containers and zinc rich internal protective coatings are prohibited. The closure is to be liquid and gas tight and resistant to “breathing” (i.e. the exchange of air between the headspace of the container and its surroundings due to differences in pressure). | **M** | Y/N |  |  |  |
| 2.1.e | Before filling, all containers shall be clean and free from loose rust, paint flakes, etc. Where a product has been subjected to micro filtration, meticulous cleanliness of the container and filling equipment must be assured. Containers are to be closed immediately after filling and appropriately marked. | **M** | Y/N |  |  |  |
| 2.1.f | Containers shall not be damaged, leaky and/or corroded upon delivery. | **M** | Y/N | DALO reserve the right to reject containers which are damaged, leaky and/or corroded when delivered. |  |  |
| 2.1.g | The Supplier shall comply with regulation (EC) No 1272/2008 of the European Parliament and of the Council, of 16 December 2008, on classification, labelling and packaging of substances and mixtures (CLP) including all following amendments of the regulation and undertake the obligations of the Supplier described therein regardless of whether the Supplier is in fact based inside or outside the European Union. | **M** | Y/N |  |  |  |
| 2.1.h | The labelling necessitated by Requirement 2.1.g shall be in Danish language. | **M** | Y/N |  |  |  |
| 2.1.i | The Supplier shall comply with Regulation (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) including all following amendments of the regulation and undertake the obligations of the Supplier described therein regardless of whether the Supplier is in fact based inside or outside the European Union. | **M** | Y/N |  |  |  |
| 2.1.j | For all offered products, the Supplier shall provide a Safety Data Sheet compliant with the requirements set out by Commission Regulation (EU) 2015/830 of 28 May 2015, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). | **M** | Y/N  DC | The Supplier shall enclose Safety Data Sheets for all products offered. |  |  |
| 2.1.k | The Safety Data Sheets necessitated by Requirement 2.1.j shall be written in Danish or English language. Danish language is strongly preferred. | **M** | Y/N |  |  |  |
|  | **Product documentation** |  |  |  |  |  |
| 2.1.l | The Supplier shall, on DALOs request, provide a Product Data Sheet for any offered product. | **M** | Y/N | The Product Data Sheet should generally contain a description of the product composition and properties including key physical-, chemical- and performance characteristics, a general description of the scope of applications for which the product is suitable for use, and preferably also include information on the shelf life of the product as well as directions for use, and guidelines for storage conditions, etc., if applicable. |  |  |
|  | **Logistic requirements** |  |  |  |  |  |
| 2.1.m | Delivery time shall be no longer than 60 working days from the date of Order Confirmation. | **M** | Y/N |  |  |  |
| 2.1.n | Delivery time should be two working days or faster (from the date of Order Confirmation). | **R** | DS | The Supplier shall state the maximum delivery time for each offered product in the price list (i.e. Appendix C.1).  The stated delivery times will be evaluated by DALO as described in Enclosure 3 - Evaluation Method.  Be aware that this is a conditional requirement (non-mandatory). Thus, non-compliance does not disqualify the tender from further evaluation (provided that the mandatory requirement regarding delivery time, i.e. requirement 2.1.m, is met).  Tenderers will be given a score based on a linear scale from 1-5 points for the evaluation sub-criterion “delivery time” as described in Enclosure 3 – Evaluation method. | N/A | N/A |
| 2.1.o | For deliveries in bulk by tank truck, the tank truck shall be equipped with a flow meter to measure the volume of fluid delivered and thus provide on-site documentation of the custody transfer. | **M** | Y/N |  |  |  |

## Requirements for NATO-coded products

All the NATO-coded products that the Tenderer offers as part of this tender shall comply with the requirements 2.2.a to 2.2.c. For a list view of the requested NATO-coded products, see section “1.3 Product Description”.

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
| 2.2.a | All NATO-coded products delivered as packed goods, which are requested in this tender, shall be marked with the following information:  a) NATO code number (e.g. “C-620”). b) Product description. c) Batch number (cf. Requirement ID 2.2.b) d) Date of Filling or Date of Manufacture (month and year). e) The Supplier’s name. f) Particulars of weight or volume of contents. g) Safety and use markings, where applicable (cf. Requirement IDs 2.1.g and 2.1.h). | **M** | Y/N | Be advised that this requirement is supplementary to the generic requirements for packaging and labelling stated in Appendix E to the Contract. |  |  |
| 2.2.b | It shall be possible to associate any delivered product with results of a conformity test performed on a sample from the same production batch identified by a unique batch number or lot number. | **M** | Y/N | Conformity with this requirement is to entail that the products are labelled with the original batch number issued by the Manufacturer and that a conformity test based on a sample from the same production batch has been documented in the form of a Certificate of Analysis or Certificate of Quality or equivalent. |  |  |
| 2.2.c | The Supplier shall - upon DALO’s request - provide a Certificate of Analysis or Certificate of Quality or equivalent, certifying that the product meets the requirements of the referred specification, for each different batch delivered. | **M** | Y/N |  |  |  |

### Requirements for C-634 – Corrosion preventive compound, water displacing

If, but only if, the Tenderer wishes to place a bid for the C-634 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.1.a | The C-634 product shall comply with the requirements of the specification DEF STAN 68-10 Issue 5, Joint Service Designation PX-24 or DCSEA 534/B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.1.b | The Supplier shall offer C-634 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.1.c | The Supplier shall offer C-634 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.1.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.1.e | On the Date of Delivery, the C-634 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for C-635 – Corrosion preventive oil, hydraulic system

If, but only if, the Tenderer wishes to place a bid for the C-635 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.2.a | The C-635 product shall comply with the requirements of the specification MIL-PRF-6083G or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.2.b | The Supplier shall offer C-635 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.2.c | The Supplier shall offer C-635 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.2.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.2.e | On the Date of Delivery, the C-635 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for C-642 – Lubricating oil, engine preservative, grade 30

If, but only if, the Tenderer wishes to place a bid for the C-642 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.3.a | The C-642 product shall comply with the requirements of the specification MIL-PRF-21260E, Grade SAE 30, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.3.b | The Supplier shall offer C-642 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.3.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.3.d | On the Date of Delivery, the C-642 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-353 – Grease, aircraft, synthetic, molybdenum disulphide

If, but only if, the Tenderer wishes to place a bid for the G-353 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.4.a | The G-353 product shall be the following proprietary product: Aeroshell Grease 64 or Royco Grease 64. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.4.b | The Supplier shall offer G-353 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.4.c | The Supplier shall offer G-353 in a packaging size of minimum 2 kilogram and maximum 5 kilogram (net weight of product). For example a 2.5 kilogram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.4.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.4.e | On the Date of Delivery, the G-353 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-354 – Grease, aircraft, synthetic, extreme pressure, type 1, Li based

If, but only if, the Tenderer wishes to place a bid for the G-354 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.5.a | The G-354 product shall be one of the following proprietary products: Aeroshell Grease 33, Rocol Aerospec 200, Nycogrease GN 10, or Nycogrease GN 148. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.5.b | The Supplier shall offer G-354 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.5.c | The Supplier shall offer G-354 in a packaging size of minimum 2 kilogram and maximum 5 kilogram (net weight of product). For example a 2.5 kilogram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.5.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.5.e | On the Date of Delivery, the G-354 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-355 – Grease, aircraft, graphite

If, but only if, the Tenderer wishes to place a bid for the G-355 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.6.a | The G-355 product shall comply with the requirements of the specification DCSEA 355/A or DEF STAN 91-054 Issue 2 with amendment 2, Joint Service Designation XG-285, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.6.b | The Supplier shall offer G-355 in a packaging size of minimum 900 gram and maximum 1100 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.6.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.6.d | On the Date of Delivery, the G-355 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-363 – Grease, plug valve, hydrocarbon resistant

If, but only if, the Tenderer wishes to place a bid for the G-363 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.7.a | The G-363 product shall comply with the requirements of the specification SAE AMS-G-6032, Type I (newest version at time of tender) or DCSEA 363/B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.7.b | The Supplier shall offer G-363 in a packaging size of minimum 2 kilogram and maximum 5 kilogram (net weight of product). For example a 2.5 kilogram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.7.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.7.d | On the Date of Delivery, the G-363 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-366 – Grease, aircraft, helicopter oscillating bearing

If, but only if, the Tenderer wishes to place a bid for the G-366 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.8.a | The G-366 product shall be the following proprietary product: Aeroshell Grease 14 or Century-Armna G-284. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.8.b | The Supplier shall offer G-366 in a packaging size of minimum 2 kilogram and maximum 5 kilogram (net weight of product). For example a 3 kilogram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.8.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.8.d | On the Date of Delivery, the G-366 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-372 – Grease, aircraft, synthetic, high temperature

If, but only if, the Tenderer wishes to place a bid for the G-372 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.9.a | The G-372 product shall comply with the specification MIL-G-25013E or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.9.b | The Supplier shall offer G-372 in a packaging size of minimum 900 gram and maximum 1100 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.9.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.9.d | On the Date of Delivery, the G-372 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-392 – Grease, aircraft, synthetic, pneumatic system

If, but only if, the Tenderer wishes to place a bid for the G-392 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.10.a | The G-392 product shall comply with the requirements of the specification SAE AMS-G-4343 (newest version at time of tender) or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.10.b | The Supplier shall offer G-392 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.10.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.10.d | On the Date of Delivery, the G-392 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-395 – Grease, aircraft, multipurpose

If, but only if, the Tenderer wishes to place a bid for the G-395 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.11.a | The G-395 product shall comply with the specification MIL-PRF-81322G or equivalent. | **M** | Y/N |  |  |  |
| 2.2.11.b | The G-395 product shall comply with the specification MIL-PRF-24508B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.11.c | The Supplier shall offer G-395 in a packaging size of minimum 1 kilogram and maximum 5 kilogram (net weight of product). For example a 2.5 kilogram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.11.d | The Supplier shall offer G-395 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.11.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.11.f | On the Date of Delivery, the G-395 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-398 – Grease, perfluorinated liquid, oxygen compatible

If, but only if, the Tenderer wishes to place a bid for the G-398 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.12.a | The G-398 product shall comply with the specification MIL-PRF-27617G with amendment 1, Type II, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.12.b | The Supplier shall offer G-398 in a packaging size of minimum 50 gram and maximum 60 gram (net weight of product). For example a tube of 2 ounces. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.12.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.12.d | On the Date of Delivery, the G-398 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-450 – Grease, naval general purpose, ball and roller bearing

If, but only if, the Tenderer wishes to place a bid for the G-450 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.13.a | The G-450 product shall comply with the requirements of the specification MIL-PRF-24139B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.13.b | The Supplier shall offer G-450 in a packaging size of minimum 3 kilogram and maximum 6 kilogram (net weight of product). For example a can of 5 kilogram. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.13.c | The Supplier shall offer G-450 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.13.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.13.e | On the Date of Delivery, the G-450 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-460 – Grease, sea water resistant

If, but only if, the Tenderer wishes to place a bid for the G-460 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.14.a | The G-460 product shall comply with the requirements of the specification DEF STAN 91-034 Issue 4 Joint Service Designation XG-286 or DCSEA 360/A or STM 310B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.14.b | The Supplier shall offer G-460 in a packaging size of minimum 900 gram and maximum 1100 kilogram (net weight of product). For example a 1000 gram can. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.14.c | The Supplier shall offer G-460 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.14.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.14.e | On the Date of Delivery, the G-460 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for G-1350 – Grease, perfluorinated liquid, oxygen compatible

If, but only if, the Tenderer wishes to place a bid for the G-1350 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.15.a | The G-1350 product shall comply with the specification MIL-PRF-27617G with amendment 1, Type IV, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.15.b | The Supplier shall offer G-1350 in a packaging size of minimum 50 gram and maximum 60 gram (net weight of product). For example a tube of 2 ounces. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.15.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.15.d | On the Date of Delivery, the G-1350 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-515 – Hydraulic fluid, petroleum, superclean

If, but only if, the Tenderer wishes to place a bid for the H-515 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.16.a | The H-515 product shall comply with the specification MIL-PRF-5606J or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.16.b | The Supplier shall offer H-515 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.16.c | The Supplier shall offer H-515 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.16.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.16.e | On the Date of Delivery, the H-515 product shall neither be older than 12 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-537 – Hydraulic fluid, synthetic hydrocarbon

If, but only if, the Tenderer wishes to place a bid for the H-537 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.17.a | The H-537 product shall comply with the specification MIL-PRF-83282D with amendment 1, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.17.b | The Supplier shall offer H-537 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.17.c | The Supplier shall offer H-537 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.17.d | The Supplier shall offer H-537 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.17.e | The Supplier shall offer H-537 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.17.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.17.g | On the Date of Delivery, the H-537 product shall neither be older than 12 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-538 – Hydraulic fluid, low temperature, synthetic

If, but only if, the Tenderer wishes to place a bid for the H-538 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.18.a | The H-538 product shall comply with the specification MIL-PRF-87257C or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.18.b | The Supplier shall offer H-538 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.18.c | The Supplier shall offer H-538 in a packaging size of minimum 1 US gallon and maximum 5 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.18.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.18.e | On the Date of Delivery, the H-538 product shall neither be older than 12 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-540 – Hydraulic fluid, petroleum

If, but only if, the Tenderer wishes to place a bid for the H-540 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.19.a | The H-540 product shall comply with the requirements of the specification TL 9150-0035 Issue 8 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.19.b | The Supplier shall offer H-540 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.19.c | The Supplier shall offer H-540 in a packaging size of minimum 5 US Gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.19.d | The Supplier shall offer H-540 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.19.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.19.f | On the Date of Delivery, the H-540 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-542 – Brake fluid, automotive, borate ester based

If, but only if, the Tenderer wishes to place a bid for the H-542 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.20.a | The H-542 product shall comply with the SAE standard J1704 (newest version at time of tender) or equivalent. | **M** | Y/N |  |  |  |
| 2.2.20.b | The Original Equilibrium Reflux Boiling Point shall be minimum 260 °C, when tested in accordance with SAE J1704 or equivalent. | **M** | Y/N |  |  |  |
| 2.2.20.c | The Wet Equilibrium Reflux Boiling Point shall be minimum 180 °C, when tested in accordance with SAE J1704 or equivalent. | **M** | Y/N |  |  |  |
| 2.2.20.d | The kinematic viscosity at minus 40 °C shall be maximum 1500 mm2/s when tested in accordance with SAE J1704 and ISO 3104 or equivalent. | **M** | Y/N |  |  |  |
| 2.2.20.e | The kinematic viscosity at 100 °C shall be maximum 3.0 mm2/s when tested in accordance with SAE J1704 and ISO 3104 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.20.f | The Supplier shall offer H-542 in a packaging size of minimum 0.25 litre and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.20.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.20.h | On the Date of Delivery, the H-542 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-544 – Hydraulic fluid, synthetic, less flammable

If, but only if, the Tenderer wishes to place a bid for the H-544 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.21.a | The H-544 product shall comply with the specification MIL-PRF-46170E, Type 1, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.21.b | The Supplier shall offer H-544 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.21.c | The Supplier shall offer H-544 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.21.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.21.e | On the Date of Delivery, the H-544 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-547 – Brake fluid, synthetic, silicone

If, but only if, the Tenderer wishes to place a bid for the H-547 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.22.a | The H-547 product shall comply with the specification MIL-PRF-46176B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.22.b | The Supplier shall offer H-547 in a packaging size of minimum 1 US quart and maximum 1 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.22.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.22.d | On the Date of Delivery, the H-547 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for H-575 – Hydraulic fluid, petroleum, ordnance

If, but only if, the Tenderer wishes to place a bid for the H-575 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.23.a | The H-575 product shall comply with the requirements of the specification MIL-DTL-17111E with amendment 1, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.23.b | The Supplier shall offer H-575 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.23.c | The Supplier shall offer H-575 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.23.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.23.e | On the Date of Delivery, the H-575 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-133 – Lubricating oil, aircraft turbine engine, petroleum

If, but only if, the Tenderer wishes to place a bid for the O-133 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.24.a | The O-133 product shall comply with the specification MIL-PRF-6081E with amendment 1, Grades 1010 as well as 1010N, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.24.b | The Supplier shall offer O-133 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.24.c | The Supplier shall offer O-133 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.24.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.24.f | On the Date of Delivery, the O-133 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-142 – Lubricating oil, general purpose low temperature

If, but only if, the Tenderer wishes to place a bid for the O-142 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.25.a | The O-142 product shall comply with the specification MIL-PRF-7870E or equivalent. | **M** | Y/N |  |  |  |
| 2.2.25.b | The O-142 product shall be one of the following proprietary products: Aeroshell Fluid 3 or Brayco 363 or BP Aero Special Oil 4. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.25.c | The Supplier shall offer O-142 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.25.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.25.e | On the Date of Delivery, the O-142 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-148 – Lubricating oil, aircraft turbine engine, synthetic 3 cSt

If, but only if, the Tenderer wishes to place a bid for the O-148 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.26.a | The O-148 product shall comply with the specification MIL-PRF-7808L, Grade 3, or equivalent. | **M** | Y/N |  |  |  |
| 2.2.26.b | The O-148 product shall be the proprietary product: Turbonycoil 160. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.26.c | The Supplier shall offer O-148 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.26.d | The Supplier shall offer O-148 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.26.e | The Supplier shall offer O-148 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.26.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.26.g | On the Date of Delivery, the O-148 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-149 – Lubricating oil, aircraft turbine engine, synthetic 7.5 cSt

If, but only if, the Tenderer wishes to place a bid for the O-149 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.27.a | The O-149 product shall comply with the specification DEF STAN 91-098 Issue 2, Joint Service Designation OX-38, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.27.b | The Supplier shall offer O-149 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.27.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.27.d | On the Date of Delivery, the O-149 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-152 – Lubricating oil, aircraft turbine engine, synth, 5 cSt C/I

If, but only if, the Tenderer wishes to place a bid for the O-152 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.28.a | The O-152 product shall comply with the specification MIL-PRF-23699G, Class C/I, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.28.b | The Supplier shall offer O-152 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.28.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.28.d | On the Date of Delivery, the O-152 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-153 – Lubricating oil, gear aircraft light grade

If, but only if, the Tenderer wishes to place a bid for the O-153 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.29.a | The O-153 product shall comply with the specification MIL-PRF-6086F with amendment 1, Grade L, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.29.b | The Supplier shall offer O-153 in a packaging size of minimum 5 US quart and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.29.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.29.d | On the Date of Delivery, the O-153 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-154 – Lubricating oil, aircraft turbine engine, synth, 5 cSt HTS

If, but only if, the Tenderer wishes to place a bid for the O-154 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.30.a | The O-154 product shall comply with the specification MIL-PRF-23699G, Class HTS, or equivalent. | **M** | Y/N |  |  |  |
| 2.2.30.b | The O-154 shall be the proprietary product Mobil Jet 254. | **M** | Y/N | Specifically required for one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.30.c | The Supplier shall offer O-154 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.30.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.30.e | On the Date of Delivery, the O-154 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-156 – Lubricating oil, aircraft turbine engine, synthetic 5 cSt

If, but only if, the Tenderer wishes to place a bid for the O-156 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.31.a | The O-156 product shall comply with the specification MIL-PRF-23699G, Class STD, or equivalent. | **M** | Y/N |  |  |  |
| 2.2.31.b | The O-156 shall be the proprietary product Mobil Jet II or Eastman Turbo Oil 2380. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.31.c | The Supplier shall offer O-156 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.31.d | The Supplier shall offer O-156 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.31.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.31.f | On the Date of Delivery, the O-156 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-158 – Lubricating oil, semi-fluid

If, but only if, the Tenderer wishes to place a bid for the O-158 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.32.a | The O-158 product shall comply with the specification MIL-L-46000D or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.32.b | The Supplier shall offer O-158 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.32.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.32.d | On the Date of Delivery, the O-158 product shall neither be older than 12 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-160 – Lubricating oil, aircraft turbine engine, synthetic 5 cSt

If, but only if, the Tenderer wishes to place a bid for the O-160 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.33.a | The O-160 shall be the proprietary product Aeroshell Turbine Oil 555. | **M** | Y/N | Specifically required by technical documentation of one or more military assets. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.33.b | The Supplier shall offer O-160 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.33.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.33.d | On the Date of Delivery, the O-160 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-190 – Lubricating oil, genereal purpose preservative light

If, but only if, the Tenderer wishes to place a bid for the O-190 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.34.a | The O-190 product shall comply with the specification MIL-PRF-32033A with amendment 1, Type I, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.34.b | The Supplier shall offer O-190 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.34.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.34.d | On the Date of Delivery, the O-190 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-226 – Lubricating oil, gear extreme pressure, grade 80W-90

If, but only if, the Tenderer wishes to place a bid for the O-226 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.35.a | The O-226 product shall comply with the requirements of the standard, SAE J2360 (2021), Grade 80W-90, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.35.b | The Supplier shall offer O-226 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.35.c | The Supplier shall offer O-226 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.35.d | The Supplier shall offer O-226 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.35.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.35.f | On the Date of Delivery, the O-226 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-228 – Lubricating oil, gear extreme pressure, grade 85W-140

If, but only if, the Tenderer wishes to place a bid for the O-228 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.36.a | The O-228 product shall comply with the requirements of the standard, SAE J2360 (2021), Grade 85W-140, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.36.b | The Supplier shall offer O-228 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.36.c | The Supplier shall offer O-228 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.36.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.36.e | On the Date of Delivery, the O-228 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-236 – Lubricating oil, engine severe duty, diesel and gasoline service, 15W-40

If, but only if, the Tenderer wishes to place a bid for the O-236 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.37.a | The O-236 product shall comply with the specification TL 9150-0063 Issue 7 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.37.b | The Supplier shall offer O-236 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.37.c | The Supplier shall offer O-236 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.37.d | The Supplier shall offer O-236 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.37.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.37.f | On the Date of Delivery, the O-236 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-237 – Lubricating oil, engine severe duty, diesel service, grade 10W

If, but only if, the Tenderer wishes to place a bid for the O-237 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.38.a | The O-237 product shall comply with the specification MIL-PRF-2104N, Grade 10W, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.38.b | The Supplier shall offer O-237 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.38.c | The Supplier shall offer O-237 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.38.d | The Supplier shall offer O-237 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.38.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.38.f | On the Date of Delivery, the O-237 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-238 – Lubricating oil, engine severe duty, diesel service, grade 30

If, but only if, the Tenderer wishes to place a bid for the O-238 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.39.a | The O-238 product shall comply with the specification MIL-PRF-2104N, Grade 30, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.39.b | The Supplier shall offer O-238 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.39.c | The Supplier shall offer O-238 in cans of minimum 15 US gallon and maximum 60 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.39.d | The Supplier shall offer O-238 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.39.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.39.f | On the Date of Delivery, the O-238 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-1178 – Lubricating oil, heavy duty engine, multigrade 5W-30

If, but only if, the Tenderer wishes to place a bid for the O-1178 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.40.a | The O-1178 product shall be of viscosity grade 5W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.2.40.b | The base oil of the O-1178 product shall be synthetic. | **M** | Y/N |  |  |  |
| 2.2.40.c | The O-1178 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category E6, E7 and E9 or equivalent. | **M** | Y/N |  |  |  |
| 2.2.40.d | The O-1178 product shall comply with the requirements associated with Volvo Drain Specification VDS-4. | **M** | Y/N |  |  |  |
| 2.2.40.e | The O-1178 product shall be either recommended and approved engine oil or technically confirmed engine oil for Scania LDF-4. | **M** | Y/N |  |  |  |
| 2.2.40.f | The O-1178 product shall comply with the requirements associated with MAN M3677. | **M** | Y/N |  |  |  |
| 2.2.40.g | The O-1178 product shall have Mercedes-Benz MB-approval 228.51 or equivalent. | **M** | Y/N |  |  |  |
| 2.2.40.h | The O-1178 product shall have load carrying capability of minimum 10 FZG failure load stage when tested in accordance with the CEC L-07-95 test method or equivalent. | **M** | Y/N | This requirement originates in NATO STANAG 7091 (Guide Specification for NATO land system oils for engines and transmissions). |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.40.i | The Supplier shall offer O-1178 in cans of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.40.j | The Supplier shall offer O-1178 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.40.k | The Supplier shall offer O-1178 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.40.l | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.40.m | On the Date of Delivery, the O-1178 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for O-1179 – Lubricating oil, engine, multigrade 5W-40

If, but only if, the Tenderer wishes to place a bid for the O-1179 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.41.a | The O-1179 product shall be of viscosity grade 5W-40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.2.41.b | The base oil of the O-1179 product shall be synthetic. | **M** | Y/N |  |  |  |
| 2.2.41.c | The O-1179 product shall comply with the specification DCSEA 215/C or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.41.d | The Supplier shall offer O-1179 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.41.e | The Supplier shall offer O-1179 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.41.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.41.g | On the Date of Delivery, the O-1179 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-720 – Anti-seize compound, aircraft, graphite petrolatum

If, but only if, the Tenderer wishes to place a bid for the S-720 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.42.a | The S-720 product shall comply with the specification DEF STAN 80-80 Issue 2 (Joint Service Designation ZX-13), AIR 4247/A Issue 2, or SAE-AMS-2518 (newest version at time of tender), or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.42.b | The Supplier shall offer S-720 in a packaging size of minimum 450 gram and maximum 1100 gram (net weight of product). For example a can of 1000 gram. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.42.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.42.d | On the Date of Delivery, the S-720 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-722 – Anti-seize compound, molybdenum disulphide

If, but only if, the Tenderer wishes to place a bid for the S-722 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.43.a | The S-722 product shall comply with the specification DEF STAN 80-81 Issue 3 with amendment 2, Joint Service Designation ZX-38, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.43.b | The Supplier shall offer S-722 in a packaging size of minimum 250 gram and maximum 500 gram (net weight of product). For example a can of 250 gram. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.43.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.43.d | On the Date of Delivery, the S-722 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-736 – Silicone compound, electrical, insulating

If, but only if, the Tenderer wishes to place a bid for the S-736 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.44.a | The S-736 product shall comply with the specification SAE AS-8660 (newest version at time of tender) or DCSEA 636/A, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.44.b | The Supplier shall offer S-736 in a packaging size of minimum 400 gram and maximum 1100 gram (net weight of product). For example a can of 500 gram. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.44.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.44.e | On the Date of Delivery, the S-736 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-737 – Isopropanol, technical

If, but only if, the Tenderer wishes to place a bid for the S-737 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.45.a | The S-737 product shall comply with the specification TT-I-735 A with amendment 3, Grade B, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.45.b | The Supplier shall offer S-737 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.2.45.c | The Supplier shall offer S-737 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.45.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |

### Requirements for S-743 – Petrolatum, technical

If, but only if, the Tenderer wishes to place a bid for the S-743 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.46.a | The S-743 product shall comply with the specification DEF STAN 91-38 Issue 3, Grade PX-7 or AIR 3565/A Issue 2, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.46.b | The Supplier shall offer S-743 in a packaging size of minimum 1 lb and maximum 1 kg (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.46.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.46.d | On the Date of Delivery, the S-743 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-749 – Lubricant, solid film, air drying

If, but only if, the Tenderer wishes to place a bid for the S-749 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.47.a | The S-749 product shall comply with the specification MIL-L-23398D with amendment 2, or equivalent. | **M** | Y/N |  |  |  |
| 2.2.47.b | The S-749 product shall not contain antimony trioxide (CAS number 1309-64-4). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.47.c | The Supplier shall offer S-749 in a packaging size of minimum 400 millilitres and maximum 1500 millilitres (volume of product). For example a can of 1 US quart. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.47.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.47.e | On the Date of Delivery, the S-749 product shall neither be older than 6 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-756 – Insulating oil, electrical

If, but only if, the Tenderer wishes to place a bid for the S-756 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.48.a | The S-756 product shall comply with the specification IEC 60296:2020 (I) or equivalent. | **M** | Y/N |  |  |  |
| 2.2.48.b | The S-756 product shall contain minimum 0.08% and maximum 0.40% of total inhibitor content as measured by IEC 60666 or equivalent method (i.e. shall be inhibited oil). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.48.c | The Supplier shall offer S-756 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.48.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.48.e | On the Date of Delivery, the S-756 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-1720 – Damping fluid, dimethyl silicone 100 cSt

If, but only if, the Tenderer wishes to place a bid for the S-1720 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.49.a | The S-1720 product shall comply with the Federal Specification VV-D-1078B, Viscosity Grade 100 cSt, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.49.b | The Supplier shall offer S-1720 in a packaging size of minimum 250 gram and maximum 1000 gram (net weight of product). For example a can of 500 gram. | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.49.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.2.49.d | On the Date of Delivery, the S-1720 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for S-1735 – Molybdenum disulphide lubricating oil, silicone base

If, but only if, the Tenderer wishes to place a bid for the S-1735 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.2.50.a | The S-1735 product shall comply with the specification MIL-DTL-25681E or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.2.50.b | The Supplier shall offer S-1735 in a packaging size of minimum 250 gram and maximum 1000 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.2.50.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |

## Requirements for products without NATO code

All the non-NATO-coded products that the Tenderer offers as part of this tender shall comply with the requirements 2.3.a to 2.3.c. For a list view of the requested NATO-coded products, see section “1.3 Product Description”.

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
| 2.3.a | All non-NATO-coded products delivered as packed goods, which are requested in this tender, shall, as a minimum, be marked with the following information:  a) DALO designation code (e.g. “MG-3007”). b) Product description. c) Batch number (cf. Requirement ID 2.3.b) d) \*Date of Filling or Date of Manufacture (month and year). e) The Supplier’s name. f) Particulars of weight or volume of contents. g) Safety and use markings, where applicable (cf. Requirement IDs 2.1.g and 2.1.h). | **M** | Y/N | \*The “Date of Filling” or “Date of Manufacture” shall be apparent from the container markings, preferably as an explicitly stated date. However, it is permitted to have the “Date of Manufacture” in a coded format (e.g. as part of the batch number), provided that the format is used consistently and that the Supplier – on request – readily explains how the date can be deduced from the coded format.  Be advised that this requirement is supplementary to the generic requirements for packaging and labelling stated in Appendix E to the Contract. |  |  |
| 2.3.b | All non-NATO-coded products delivered as packed goods, which are requested in this tender, shall be labelled with the original batch number issued by the Manufacturer. | **M** | Y/N |  |  |  |
| 2.3.c | The Supplier shall - upon DALO’s request - provide a Certificate of Analysis, Certificate of Quality or Certificate of Conformity certifying that the product meets the requirements of the referred specification, for each different batch delivered. | **M** | Y/N |  |  |  |

### Requirements for MG-3007 - Grease, multipurpose, extreme pressure, NLGI 1

If, but only if, the Tenderer wishes to place a bid for the MG-3007 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.1.a | The MG-3007 product shall be composed of mineral base oil, a lithium complex based thickening agent, and additives. | **M** | Y/N |  |  |  |
| 2.3.1.b | The MG-3007 product shall meet the requirements associated with DIN 51502, category “K P 1 N-30” or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.1.c | The Supplier shall offer MG-3007 in a packaging size of minimum 15 kilogram and maximum 20 kilogram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.1.d | The Supplier shall offer MG-3007 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.1.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.1.f | On the Date of Delivery, the MG-3007 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MG-3008 - Grease, multipurpose, extreme pressure, NLGI 2

If, but only if, the Tenderer wishes to place a bid for the MG-3008 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.2.a | The MG-3008 product shall be composed of mineral base oil, a lithium complex based thickening agent, and additives. | **M** | Y/N |  |  |  |
| 2.3.2.b | The MG-3008 product shall meet the requirements associated with DIN 51502, category “K P 2 N-30” or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.2.c | The Supplier shall offer MG-3008 in a packaging size of minimum 40 kilogram and maximum 60 kilogram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.2.d | The Supplier shall offer MG-3008 in a packaging size of minimum 0.9 kilogram and maximum 1.1 kilogram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.2.e | The Supplier shall offer MG-3008 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.2.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.2.g | On the Date of Delivery, the MG-3008 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MG-3011 - Grease, multipurpose, molybdenum disulphide, NLGI 2

If, but only if, the Tenderer wishes to place a bid for the MG-3011 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.3.a | The MG-3011 product shall be composed of mineral base oil, a lithium-based thickening agent, molybdenum disulfide and additives. | **M** | Y/N |  |  |  |
| 2.3.3.b | The MG-3011 product shall contain minimum 3 weight percent and maximum 5 weight percent of molybdenum disulfide. | **M** | Y/N |  |  |  |
| 2.3.3.c | The MG-3011 product shall meet the requirements associated with DIN 51502, category K PF 2 K-30 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.3.d | The Supplier shall offer MG-3011 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.3.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.3.f | On the Date of Delivery, the MG-3011 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MG-3023 - Grease, multipurpose, extreme pressure, NLGI 3

If, but only if, the Tenderer wishes to place a bid for the MG-3023 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.4.a | The MG-3023 product shall be composed of mineral base oil, a lithium complex based thickening agent, and additives. | **M** | Y/N |  |  |  |
| 2.3.4.b | Following the classification scheme of ISO 6743-9, the MG-3023 product shall meet the requirements associated with classification as category ISO-L-XBDEB3 or equivalent. | **M** | Y/N | This requirement entails that the product shall have an operating-temperature range of minus 20 °C to plus 140 °C (or wider), that the product is resistant to water under static conditions, that the product provides anti-rust protection in the presence of water, that the product has extreme pressure properties and that the product has a consistency corresponding to NLGI class 3. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.4.c | The Supplier shall offer MG-3023 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.4.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.4.e | On the Date of Delivery, the MG-3023 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MG-3078 – Grease, aircraft, synthetic, extreme pressure, type 2, clay based

If, but only if, the Tenderer wishes to place a bid for the MG-3078 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.5.a | The MG-3078 product shall comply with the requirements associated with MIL-PRF-23827C with amendment 2, Type II, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.5.b | The Supplier shall offer G-354 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.5.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.5.d | On the Date of Delivery, the MG-3078 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MG-3083 – Grease, aircraft, synthetic, wide temperature, Li based

If, but only if, the Tenderer wishes to place a bid for the MG-3083 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.6.a | The MG-3083 product shall comply with the requirements associated with SAE-AMS-3058 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.6.b | The Supplier shall offer MG-3083 as grease cartridges of minimum 350 gram and maximum 450 gram (net weight of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (net weight of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.6.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.6.d | On the Date of Delivery, the MG-3083 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4000 - Hydraulic oil, mineral, zink antiwear, ISO VG 15

If, but only if, the Tenderer wishes to place a bid for the MH-4000 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.7.a | The MH-4000 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.7.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.7.c | The MH-4000 product shall have a kinematic viscosity at 40 °C of minimum 13.5 and maximum 16.5 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 15, when classified in accordance with ISO 3448. |  |  |
| 2.3.7.d | The MH-4000 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.7.e | The MH-4000 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.7.f | The Supplier shall offer MH-4000 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.7.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.7.h | On the Date of Delivery, the MH-4000 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4001 - Hydraulic oil, mineral, zink antiwear, ISO VG 32

If, but only if, the Tenderer wishes to place a bid for the MH-4001 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.8.a | The MH-4001 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.8.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.8.c | The MH-4001 product shall have a kinematic viscosity at 40 °C of minimum 28.8 and maximum 35.2 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 32, when classified in accordance with ISO 3448. |  |  |
| 2.3.8.d | The MH-4001 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.8.e | The MH-4001 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.8.f | The Supplier shall offer MH-4001 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.8.g | The Supplier shall offer MH-4001 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.8.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.8.i | On the Date of Delivery, the MH-4001 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4002 - Hydraulic oil, mineral, zink antiwear, ISO VG 46

If, but only if, the Tenderer wishes to place a bid for the MH-4002 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.9.a | The MH-4002 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.9.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.9.c | The MH-4002 product shall have a kinematic viscosity at 40 °C of minimum 41.4 and maximum 50.6 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 46, when classified in accordance with ISO 3448. |  |  |
| 2.3.9.d | The MH-4002 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.9.e | The MH-4002 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.9.f | The Supplier shall offer MH-4002 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.9.g | The Supplier shall offer MH-4002 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.9.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.9.i | On the Date of Delivery, the MH-4002 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4003 – Hydraulic oil, mineral, zink antiwear, ISO VG 68

If, but only if, the Tenderer wishes to place a bid for the MH-4003 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.10.a | The MH-4003 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.10.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.10.c | The MH-4003 product shall have a kinematic viscosity at 40 °C of minimum 61.2 and maximum 74.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 68, when classified in accordance with ISO 3448. |  |  |
| 2.3.10.d | The MH-4003 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.10.e | The MH-4003 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.10.f | The Supplier shall offer MH-4003 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.10.g | The Supplier shall offer MH-4003 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.10.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.10.i | On the Date of Delivery, the MH-4003 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4004 - Hydraulic oil, mineral, zink antiwear, ISO VG 100

If, but only if, the Tenderer wishes to place a bid for the MH-4004 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.11.a | The MH-4004 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.11.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.11.c | The MH-4004 product shall have a kinematic viscosity at 40 °C of minimum 90 and maximum 110 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 100, when classified in accordance with ISO 3448. |  |  |
| 2.3.11.d | The MH-4004 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.11.e | The MH-4004 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.11.f | The Supplier shall offer MH-4004 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.11.g | The Supplier shall offer MH-4004 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.11.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.11.i | On the Date of Delivery, the MH-4004 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4005 - Hydraulic oil, mineral, zink antiwear, ISO VG 22

If, but only if, the Tenderer wishes to place a bid for the MH-4005 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.12.a | The MH-4005 product shall be hydraulic oil composed of mineral base oil and additives. The formulation shall include a zink-based antiwear additive. | **M** | Y/N |  |  |  |
| 2.3.12.b | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.12.c | The MH-4005 product shall have a kinematic viscosity at 40 °C of minimum 19.8 and maximum 24.4 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 22, when classified in accordance with ISO 3448. |  |  |
| 2.3.12.d | The MH-4005 product shall meet the requirements associated with DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.12.e | The MH-4005 product shall meet the requirements associated with ISO 11158 HV fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.12.f | The Supplier shall offer MH-4005 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.12.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.12.h | On the Date of Delivery, the MH-4005 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4007 – Hydraulic oil, mineral, ashless, ISO VG 100

If, but only if, the Tenderer wishes to place a bid for the MH-4007 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.13.a | The MH-4007 product shall be hydraulic oil composed of mineral base oil and additives (including an ashless antiwear additive). | **M** | Y/N |  |  |  |
| 2.3.13.b | The MH-4007 product shall have a kinematic viscosity at 40 °C of minimum 90 and maximum 110 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 100, when classified in accordance with ISO 3448. |  |  |
| 2.3.13.c | The MH-4007 product shall meet the requirements associated with DIN 51524-2, HLP or equivalent. | **M** | Y/N |  |  |  |
| 2.3.13.d | The MH-4007 product shall meet the requirements associated with ISO 11158 HM fluids or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.13.e | The Supplier shall offer MH-4007 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.13.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.13.g | On the Date of Delivery, the MH-4007 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4014 – Hydraulic oil, biodegradable, ISO VG 46

If, but only if, the Tenderer wishes to place a bid for the MH-4014 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.14.a | The MH-4014 product shall be biodegradable hydraulic oil composed of synthetic ester base oil and additives (including an ashless antiwear additive). | **M** | Y/N |  |  |  |
| 2.3.14.b | The MH-4014 product shall have a kinematic viscosity at 40 °C of minimum 41.4 and maximum 50.6 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 46, when classified in accordance with ISO 3448. |  |  |
| 2.3.14.c | The MH-4014 product shall meet the requirements associated with ISO 15380, HEES or equivalent. | **M** | Y/N |  |  |  |
| 2.3.14.d | The MH-4014 product shall meet the requirements of Swedish Standard SS 15 54 34 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.14.e | The Supplier shall offer MH-4014 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.14.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.14.g | On the Date of Delivery, the MH-4014 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4021 – Hydraulic oil, mineral, high VI, ISO VG 32

If, but only if, the Tenderer wishes to place a bid for the MH-4021 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.15.a | The MH-4021 product shall have a kinematic viscosity at 40 °C of minimum 28.8 and maximum 35.2 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 32, when classified in accordance with ISO 3448. |  |  |
| 2.3.15.b | The MH-4021 product shall meet the requirements of Swedish Defence standard FSD 8401 (Försvarsstandard FSD 8401) or equivalent. | **M** | Y/N |  |  |  |
| 2.3.15.c | The MH-4021 product shall meet the requirements of DIN 51524-3, HVLP or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.15.d | The Supplier shall offer MH-4021 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.15.e | The Supplier shall offer MH-4021 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.15.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.15.g | On the Date of Delivery, the MH-4021 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MH-4022 – Environmentally Acceptable Lubricant ISO VG 68, stabs & hydraulics

If, but only if, the Tenderer wishes to place a bid for the MH-4022 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.16.a | The MH-4022 product shall have a kinematic viscosity at 40 °C of minimum 61.2 and maximum 74.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 68, when classified in accordance with ISO 3448. |  |  |
| 2.3.16.b | The MH-4022 product shall be an Environmentally Acceptable Lubricant (EAL) in accordance with US EPA Vessel General Permit 2013. | **M** | Y/N |  |  |  |
| 2.3.16.c | The MH-4022 product shall be an approved non-emulsifying Environmentally Acceptable Lubricant (EAL) for stabilizer hydraulic systems in accordance with Rolls-Royce Service Bulletin, Doc. ID R-062224 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.16.d | The MH-4022 product shall meet the requirements for use in SKF fin stabilizers in accordance with SKF Marine “List of lubricants – biodegradable” (Doc. ID S621-0525-008-000-01 R) or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.16.e | The Supplier shall offer MH-4022 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.16.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.16.g | On the Date of Delivery, the MH-4022 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2001 – Lubricating oil, aircraft, piston engine, SAE 15W-50

If, but only if, the Tenderer wishes to place a bid for the MO-2001 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.17.a | The MO-2001 product shall be of viscosity grade SAE 15W-50 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.17.b | The MO-2001 product shall comply with the Textron Lycoming specification 301F or equivalent. | **M** | Y/N |  |  |  |
| 2.3.17.c | The MO-2001 product shall meet the provisions of Lycoming Service Bulletin 446C and 471 as well as Service Instruction 1409A or equivalent. | **M** | Y/N |  |  |  |
| 2.3.17.d | The MO-2001 product shall comply with the specification SAE J-1899. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.17.e | The Supplier shall offer MO-2001 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.17.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.17.g | On the Date of Delivery, the MO-2001 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2002 – Lubricating oil, engine, SAE 10W-40

If, but only if, the Tenderer wishes to place a bid for the MO-2002 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.18.a | The MO-2002 product shall be of viscosity grade SAE 10W-40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.18.b | The MO-2002 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category SN/CF or equivalent. | **M** | Y/N |  |  |  |
| 2.3.18.c | The MO-2002 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category A3/B4 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.18.d | The MO-2002 product shall comply with the Volkswagen VW 505.00 specification or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.18.e | The Supplier shall offer MO-2002 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.18.f | The Supplier shall offer MO-2002 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.18.g | The Supplier shall offer MO-2002 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.18.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.18.i | On the Date of Delivery, the MO-2002 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2008 – Lubricating oil, engine, Detroit Diesel two-stroke, SAE 40

If, but only if, the Tenderer wishes to place a bid for the MO-2008 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.19.a | The MO-2008 product shall be of viscosity grade SAE 40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.19.b | The MO-2008 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CF-2 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.19.c | The MO-2008 product shall have a sulphated ash content of maximum 1.0 weight percent (as measured in accordance with ASTM D874 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.19.d | The MO-2008 product shall have a Total Base Number (TBN) of minimum 7.0 mg KOH/g (when measured in accordance with ASTM D2896 or equivalent). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.19.e | The Supplier shall offer MO-2008 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.19.f | The Supplier shall offer MO-2008 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.19.g | The Supplier shall offer MO-2008 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.19.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.19.i | On the Date of Delivery, the MO-2008 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2009 – Lubricating oil, engine, marine, high dispersancy, SAE 30

If, but only if, the Tenderer wishes to place a bid for the MO-2009 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.20.a | The MO-2009 product shall be of viscosity grade SAE 30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.20.b | The MO-2009 product shall be of one of the products on “MAN – Approval List for Lube Oil in Distillate Fuel Oil Operation (SAE 30)” or equivalent.. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.20.c | The Supplier shall offer MO-2009 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.20.d | The Supplier shall offer MO-2009 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.20.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.20.f | On the Date of Delivery, the MO-2009 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2010 – Lubricating oil, engine, SAE 15W-40

If, but only if, the Tenderer wishes to place a bid for the MO-2010 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.21.a | The MO-2010 product shall be of viscosity grade SAE 15W-40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.21.b | The MO-2010 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category E7 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.21.c | The MO-2010 product shall have a sulphated ash content of maximum 1.5 weight percent (as measured in accordance with ASTM D874 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.21.d | The MO-2010 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CI-4 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.21.e | The MO-2010 product shall meet the performance requirements associated with Caterpillar Engine Crankcase Fluids definition ECF-2 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.21.f | The MO-2010 product shall meet the performance requirements associated with Volvo Drain Specification VDS-3 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.21.g | The MO-2010 product shall meet the requirements associated with MTU Oil Category 2 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.21.h | The MO-2010 product shall meet the performance requirements associated with Cummins CES 20076, 20077 and 20078 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.21.i | The Supplier shall offer MO-2010 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.21.j | The Supplier shall offer MO-2010 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.21.k | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.21.l | On the Date of Delivery, the MO-2010 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2014 – Lubricating oil, engine MTU 8000-series, SAE 30

If, but only if, the Tenderer wishes to place a bid for the MO-2014 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.22.a | The MO-2014 product shall be of viscosity grade SAE 30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.22.b | The MO-2014 product shall be approved for use in MTU Series 8000 applications. | **M** | Y/N | According to MTU Fluids and Lubricants Specifications (A001061/40E), the following proprietary products (with viscosity grade SAE 30) are approved for MTU Series 8000 applications:   * Castrol HLX SAE 30 * Chevron Delo 400 SAE 30 * Exxon Mobil Delvac 1630 * Mobilgard ADL 30 * Shell Sirius X SAE 30 |  |  |
| 2.3.22.c | The MO-2014 product shall be approved for MTU Oil Category 2. | **M** | Y/N |  |  |  |
| 2.3.22.d | MO-2014 product shall be fully miscible and compatible with Chevron Delo 400 SAE 30. | **M** | Y/N | Chevron Delo 400 SAE 30is the lubricating oil in use for the MTU 8000-series engines at the time of tender. Since the volume of oil in the 8000-series engine is considerable, it is important that the existing volume of oil may be topped off with the offered MO-2014 product – without having the mixture perform worse than both of the two constituent oils in their pure forms. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.22.e | The Supplier shall offer MO-2014 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.22.f | The Supplier shall offer MO-2014 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.22.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.22.h | On the Date of Delivery, the MO-2014 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2017 – Lubricating oil, engine, marine, SAE 40

If, but only if, the Tenderer wishes to place a bid for the MO-2017 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.23.a | The MO-2017 product shall be of viscosity grade SAE 40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.23.b | The MO-2017 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CF or equivalent. | **M** | Y/N |  |  |  |
| 2.3.23.c | The MO-2017 product shall have a sulphated ash content of maximum 1.5 weight percent (as measured in accordance with ASTM D874 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.23.d | The MO-2017 product shall have a Total Base Number (TBN) between 11.0 and 16.0 mg KOH/g (when measured in accordance with ASTM D2896 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.23.e | The MO-2017 product shall have a load carrying capacity level of minimum 12 (Failure Load Stage, FZG), when tested in accordance with ISO 14635-1 FZG test method A/8.3/90 or equivalent | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.23.f | The Supplier shall offer MO-2017 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.23.g | The Supplier shall offer MO-2017 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.23.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.23.i | On the Date of Delivery, the MO-2017 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2018 – Lubricating oil, engine severe duty, diesel service, SAE 40

If, but only if, the Tenderer wishes to place a bid for the MO-2018 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.24.a | The MO-2018 product shall be of viscosity grade SAE 40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.24.b | The MO-2018 product shall be one of the products on “MAN – Approval List for Lube Oil in Distillate Fuel Oil Operation (SAE 40)” or equivalent. | **M** | Y/N |  |  |  |
| 2.3.24.c | The MO-2018 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CF or equivalent. | **M** | Y/N |  |  |  |
| 2.3.24.d | The MO-2018 product shall have a Total Base Number (TBN) between 10.0 and 16.0 mg KOH/g (when measured in accordance with ASTM D2896 or equivalent). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.24.e | The Supplier shall offer MO-2018 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.24.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.24.g | On the Date of Delivery, the MO-2018 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2020 – Lubricating oil, engine, synthetic, SAE 0W-30

If, but only if, the Tenderer wishes to place a bid for the MO-2020 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.25.a | The MO-2020 product shall be of viscosity grade SAE 0W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.25.b | The MO-2020 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.25.c | The MO-2020 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category A5/B5 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.25.d | The MO-2020 product shall comply with the Volkswagen specifications VW 503.00, VW 506.00, and VW 506.01 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.25.e | The Supplier shall offer MO-2020 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.25.f | The Supplier shall offer MO-2020 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.25.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.25.h | On the Date of Delivery, the MO-2020 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2021 – Lubricating oil, engine, synthetic, SAE 10W-40

If, but only if, the Tenderer wishes to place a bid for the MO-2021 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.26.a | The MO-2021 product shall be of viscosity grade SAE 10W-40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.26.b | The MO-2021 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.26.c | The MO-2021 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Categories E6 and E7 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.26.d | The MO-2021 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CI-4 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.26.e | The MO-2021 product shall have Mercedes-Benz MB-approval 228.51 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.26.f | The Supplier shall offer MO-2021 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.26.g | The Supplier shall offer MO-2021 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.26.h | The Supplier shall offer MO-2021 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.26.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.26.j | On the Date of Delivery, the MO-2021 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2022 – Lubricating oil, engine, synthetic, SAE 5W-30

If, but only if, the Tenderer wishes to place a bid for the MO-2022 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.27.a | The MO-2022 product shall be of viscosity grade SAE 5W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.27.b | The MO-2022 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.27.c | The MO-2022 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Categories C3 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.27.d | The MO-2022 product shall comply with the Volkswagen specifications VW 504.00 and VW 507.00 (Longlife III oil) or equivalent. | **M** | Y/N |  |  |  |
| 2.3.27.e | The MO-2022 product shall have Mercedes-Benz MB-approval 229.51 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.27.f | The Supplier shall offer MO-2022 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.27.g | The Supplier shall offer MO-2022 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.27.h | The Supplier shall offer MO-2022 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.27.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.27.j | On the Date of Delivery, the MO-2022 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2024 – Lubricating oil, engine, ACEA E9, SAE 15W-40

If, but only if, the Tenderer wishes to place a bid for the MO-2024 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.28.a | The MO-2024 product shall be of viscosity grade SAE 15W-40 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.28.b | The MO-2024 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category E9 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.28.c | The MO-2024 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CJ-4 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.28.d | The MO-2024 product shall have a Total Base Number (TBN) of minimum 8.0 mg KOH/g (when measured in accordance with ASTM D2896, ISO 3771 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.28.e | The MO-2024 product shall meet the requirements associated with Volvo Drain Specifications VDS-4 and VDS-3 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.28.f | The Supplier shall offer MO-2024 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.28.g | The Supplier shall offer MO-2024 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.28.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.28.i | On the Date of Delivery, the MO-2024 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2033 – Lubricating oil, engine, Ford WSS-M2C 913B, SAE 5W-30

If, but only if, the Tenderer wishes to place a bid for the MO-2033 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.29.a | The MO-2033 product shall be of viscosity grade SAE 5W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.29.b | The MO-2033 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Categories A1/B1 and A5/B5 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.29.c | The MO-2033 product shall meet the requirements associated with the Ford specification WSS-M2C-913B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.29.d | The Supplier shall offer MO-2033 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.29.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.29.f | On the Date of Delivery, the MO-2033 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2034 – Lubricating oil, engine, CAT ECF-3, SAE 10W-30

If, but only if, the Tenderer wishes to place a bid for the MO-2034 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.30.a | The MO-2034 product shall be of viscosity grade SAE 10W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.30.b | The MO-2034 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CJ-4 and Caterpillar ECF-3 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.30.c | The MO-2034 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category E9 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.30.d | The Supplier shall offer MO-2034 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.30.e | The Supplier shall offer MO-2034 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.30.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.30.g | On the Date of Delivery, the MO-2034 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2040 – Lubricating oil, engine, synthetic, SAE 5W-30

If, but only if, the Tenderer wishes to place a bid for the MO-2040 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.31.a | The MO-2040 product shall be of viscosity grade 5W-30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.31.b | The MO-2040 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.31.c | The MO-2040 product shall meet the requirements associated with ACEA European Oil Sequences for Service-Fill Oils, Category C3 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.31.d | The MO-2040 product shall meet the requirements associated with BMW Longlife-04 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.31.e | The MO-2040 product shall have Mercedes-Benz MB-approvals 229.51 and 229.31 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.31.f | The Supplier shall offer MO-2040 in cans of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.31.g | The Supplier shall offer MO-2040 in cans of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.31.h | The Supplier shall offer MO-2040 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.31.i | The Supplier shall offer MO-2040 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.31.j | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.31.k | On the Date of Delivery, the MO-2040 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2102 – Lubricating oil, gear, API GL-4, SAE 80W-90

If, but only if, the Tenderer wishes to place a bid for the MO-2102 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.32.a | The MO-2102 product shall meet the requirements associated with American Petroleum Institute Lubricant Service Designations for Automotive Manual Transmissions, Manual Transaxles, and Axles – Service Designation API GL-4 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.32.b | The MO-2102 product shall be of viscosity grade SAE 80W-90 (when classified in accordance with SAE J306). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.32.c | The Supplier shall offer MO-2102 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.32.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.32.e | On the Date of Delivery, the MO-2102 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2103 – Lubricating oil, gear, synthetic, API GL-5, SAE 75W-90

If, but only if, the Tenderer wishes to place a bid for the MO-2103 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.33.a | The MO-2103 product shall meet the requirements associated with American Petroleum Institute Lubricant Service Designations for Automotive Manual Transmissions, Manual Transaxles, and Axles – Service Designation API GL-5 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.33.b | The MO-2103 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.33.c | The MO-2103 product shall be of viscosity grade SAE 75W-90 (when classified in accordance with SAE J306). | **M** | Y/N |  |  |  |
| 2.3.33.d | The MO-2103 product shall be either recommended and approved oil or technically confirmed oil for the Scania STO 2:0G specification. | **M** | Y/N |  |  |  |
| 2.3.33.e | The MO-2103 product shall comply with the requirements associated with ZF Friedrichshafen AG lubricant class ZF TE-ML 19C or equivalent | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.33.f | The Supplier shall offer MO-2103 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.33.g | The Supplier shall offer MO-2103 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.33.h | The Supplier shall offer MO-2103 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.33.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.33.j | On the Date of Delivery, the MO-2103 product shall neither be older than 24 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2104 – Automatic Transmission Fluid, Dexron III

If, but only if, the Tenderer wishes to place a bid for the MO-2104 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.34.a | The MO-2104 product shall meet the requirements of the specification General Motors Dexron III-H or equivalent. | **M** | Y/N |  |  |  |
| 2.3.34.b | The MO-2104 product shall have a Load Carrying Capacity of minimum 10 FZG Failure Load Stage, when measured in accordance with CEC L-07 A-95 or equivalent method. | **M** | Y/N |  |  |  |
| 2.3.34.c | The MO-2104 product shall have an Air Release Value of maximum 10 minutes, when measured in accordance with ISO 9120 or ASTM D3427 or equivalent method. | **M** | Y/N |  |  |  |
| 2.3.34.d | The MO-2104 product shall have Foam Forming Tendency of maximum 20 ml / 50 ml / 20 ml (for sequences I/II/III respectively), when measured in accordance with ISO 6247 or ASTM D892 or equivalent method. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.34.e | The Supplier shall offer MO-2104 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.34.f | The Supplier shall offer MO-2104 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.34.g | The Supplier shall offer MO-2104 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.34.h | The Supplier shall offer MO-2104 in bulk (bulk delivery by truck, minimum order quantity 1000 litres). | **M** | Y/N  DS | The Supplier shall state the price per litre on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.34.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.34.j | On the Date of Delivery, the MO-2104 product shall neither be older than 18 months (counting from the Date of Manufacture or – for packed goods – Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2105 – Lubricating oil, gear, extreme pressure, ISO VG 68

If, but only if, the Tenderer wishes to place a bid for the MO-2105 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.35.a | The MO-2105 product shall have a kinematic viscosity at 40 °C of minimum 61.2 and maximum 74.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 68, when classified in accordance with ISO 3448. |  |  |
| 2.3.35.b | The MO-2105 product shall be formulated with mineral base oil. | **M** | Y/N |  |  |  |
| 2.3.35.c | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.35.d | The MO-2105 product shall meet the requirements of the standard DIN 51517, Part 3, CLP, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.35.e | The MO-2105 product shall meet the requirements of the standard ISO 12925-1, CKD, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.35.f | The MO-2105 product shall be one of the products on “Kongsberg Approved Oil List” (Doc. ID DMN000267023) or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.35.g | The Supplier shall offer MO-2105 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.35.h | The Supplier shall offer MO-2105 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.35.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.35.j | On the Date of Delivery, the MO-2105 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2106 - Lubricating oil, gear, extreme pressure, ISO VG 150

If, but only if, the Tenderer wishes to place a bid for the MO-2106 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.36.a | The MO-2106 product shall have a kinematic viscosity at 40 °C of minimum 135 and maximum 165 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 150, when classified in accordance with ISO 3448. |  |  |
| 2.3.36.b | The MO-2106 product shall be formulated with mineral base oil. | **M** | Y/N |  |  |  |
| 2.3.36.c | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.36.d | The MO-2106 product shall meet the requirements of the standard DIN 51517, Part 3, CLP, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.36.e | The MO-2106 product shall meet the requirements of the standard ISO 12925-1, CKD, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.36.f | The Supplier shall offer MO-2106 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.36.g | The Supplier shall offer MO-2106 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.36.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.36.i | On the Date of Delivery, the MO-2106 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2108 - Lubricating oil, gear, extreme pressure, ISO VG 320

If, but only if, the Tenderer wishes to place a bid for the MO-2108 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.37.a | The MO-2108 product shall have a kinematic viscosity at 40 °C of minimum 288 and maximum 352 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 320, when classified in accordance with ISO 3448. |  |  |
| 2.3.37.b | The MO-2108 product shall be formulated with mineral base oil. | **M** | Y/N |  |  |  |
| 2.3.37.c | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.37.d | The MO-2108 product shall meet the requirements of the standard DIN 51517, Part 3, CLP, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.37.e | The MO-2108 product shall meet the requirements of the standard ISO 12925-1, CKD, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.37.f | The Supplier shall offer MO-2108 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.37.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.37.h | On the Date of Delivery, the MO-2108 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2110 - Lubricating oil, gear, extreme pressure, ISO VG 680

If, but only if, the Tenderer wishes to place a bid for the MO-2110 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.38.a | The MO-2110 product shall have a kinematic viscosity at 40 °C of minimum 612 and maximum 748 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 680, when classified in accordance with ISO 3448. |  |  |
| 2.3.38.b | The MO-2110 product shall be formulated with mineral base oil. | **M** | Y/N |  |  |  |
| 2.3.38.c | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.38.d | The MO-2110 product shall meet the requirements of the standard DIN 51517, Part 3, CLP, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.38.e | The MO-2110 product shall meet the requirements of the standard ISO 12925-1, CKD, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.38.f | The Supplier shall offer MO-2110 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.38.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.38.h | On the Date of Delivery, the MO-2110 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2114 - Lubricating oil, gear, limited-slip, API GL-5, SAE 80W-90 / 85W-90

If, but only if, the Tenderer wishes to place a bid for the MO-2114 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.39.a | The MO-2114 product shall meet the requirements associated with American Petroleum Institute Lubricant Service Designations for Automotive Manual Transmissions, Manual Transaxles, and Axles - Service Designation API GL-5, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.39.b | The MO-2114 product shall be of viscosity grade SAE 80W-90 or SAE 85W-90 (when classified in accordance with SAE J306). | **M** | Y/N |  |  |  |
| 2.3.39.c | The MO-2114 product shall comply with the requirements associated with ZF Friedrichshafen AG lubricant class ZF TE-ML 05C or equivalent. | **M** | Y/N |  |  |  |
| 2.3.39.d | The MO-2114 product shall comply with the requirements associated with ZF Friedrichshafen AG lubricant class ZF TE-ML 12C or equivalent | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.39.e | The Supplier shall offer MO-2114 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.39.f | The Supplier shall offer MO-2114 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.39.g | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.39.h | On the Date of Delivery, the MO-2114 product shall neither be older than 12 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2115 - Lubricating oil, gear, extreme pressure, ISO VG 100

If, but only if, the Tenderer wishes to place a bid for the MO-2115 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.40.a | The MO-2115 product shall have a kinematic viscosity at 40 °C of minimum 90 and maximum 110 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 100, when classified in accordance with ISO 3448. |  |  |
| 2.3.40.b | The MO-2115 product shall be formulated with mineral base oil. | **M** | Y/N |  |  |  |
| 2.3.40.c | The mineral base oil shall be based on Group II and/or III base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.40.d | The MO-2115 product shall meet the requirements of the standard DIN 51517, Part 3, CLP, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.40.e | The MO-2115 product shall meet the requirements of the standard ISO 12925-1, CKD, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.40.f | The Supplier shall offer MO-2115 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.40.g | The Supplier shall offer MO-2115 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.40.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.40.i | On the Date of Delivery, the MO-2115 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2119 - Transmission fluid, off-highway, Allison TES 353

If, but only if, the Tenderer wishes to place a bid for the MO-2119 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.41.a | The MO-2119 product shall be an Allison approved TES 353 fluid or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.41.b | The Supplier shall offer MO-2119 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.41.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.41.d | On the Date of Delivery, the MO-2119 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2121 - Universal Tractor Transmission Oil (UTTO)

If, but only if, the Tenderer wishes to place a bid for the MO-2121 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.42.a | The MO-2121 product shall meet the requirements associated with American Petroleum Institute Lubricant Service Designations for Automotive Manual Transmissions, Manual Transaxles, and Axles - Service Designation API GL-4, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.42.b | The MO-2121 product shall comply with the requirements associated with ZF Friedrichshafen AG lubricant class ZF TE-ML 03E, 05F, 06K and 17E, or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.42.c | The Supplier shall offer MO-2121 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product) | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.42.d | The Supplier shall offer MO-2121 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.42.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.42.f | On the Date of Delivery, the MO-2121 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2123 - Automatic Transmission Fluid, MB 236.14

If, but only if, the Tenderer wishes to place a bid for the MO-2123 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.43.a | The MO-2123 product shall have Mercedes-Benz MB-approval 236.14 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.43.b | The Supplier shall offer MO-2123 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.43.c | The Supplier shall offer MO-2123 in a packaging size of minimum 15 US gallon and maximum 60 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.43.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.43.e | On the Date of Delivery, the MO-2123 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2127 - Transmission oil for construction equipment, SAE 50

If, but only if, the Tenderer wishes to place a bid for the MO-2127 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.44.a | The MO-2127 product shall be of viscosity grade SAE 50 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.44.b | The MO-2127 product shall meet the requirements of Caterpillar specification TO-4 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.44.c | The Supplier shall offer MO-2127 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product) | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.44.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.44.e | On the Date of Delivery, the MO-2127 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2129 - Lubricating oil, engine, marine, SAE 30

If, but only if, the Tenderer wishes to place a bid for the MO-2129 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.45.a | The MO-2129 product shall be of viscosity grade SAE 30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.45.b | The MO-2129 product shall meet the requirements associated with API (American Petroleum Institute) Engine Service Category CF or equivalent. | **M** | Y/N |  |  |  |
| 2.3.45.c | The MO-2129 product shall have a sulphated ash content of maximum 1.5 weight percent (as measured in accordance with ASTM D874 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.45.d | The MO-2129 product shall have a Total Base Number (TBN) between 11.0 and 16.0 mg KOH/g (when measured in accordance with ASTM D2896 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.45.e | The MO-2129 product shall have a load carrying capacity level of minimum 12 (Failure Load Stage, FZG), when tested in accordance with ISO 14635-1 FZG test method A/8.3/90 or equivalent | **M** | Y/N |  |  |  |
| 2.3.45.f | The MO-2129 product shall be fully miscible and compatible with Shell Gadinia S3 30. | **M** | Y/N | Shell Gadinia S3 30 is in use in numerous lubricated systems at the time of tender. It is important that those systems may be topped off with the offered MO-2129 product – without having the mixture perform worse than both of the two constituent oils in their pure forms. |  |  |
| 2.3.45.g | The MO-2129 product shall be approved by Renk AG for gear type NDSL2500. | **M** | Y/N |  |  |  |
| 2.3.45.h | The MO-2129 product shall be approved by MAN Diesel and Turbo for 8L27/38 MDO (Marine Diesel Oil) 4-stroke engines. | **M** | Y/N |  |  |  |
| 2.3.45.i | The MO-2129 product shall comply with the requirements associated with ZF Friedrichshafen AG lubricant class ZF TE-ML 04B or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.45.j | The Supplier shall offer MO-2129 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.45.k | The Supplier shall offer MO-2129 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.45.l | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.45.m | On the Date of Delivery, the MO-2129 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2136 - Transmission oil, CAT TO-4, SAE 10W

If, but only if, the Tenderer wishes to place a bid for the MO-2136 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.46.a | The MO-2136 product shall be of viscosity grade SAE 10W (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.46.b | The MO-2136 product shall meet the requirements of Caterpillar specification TO-4 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.46.c | The Supplier shall offer MO-2136 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product) | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.46.d | The Supplier shall offer MO-2136 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.46.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.46.f | On the Date of Delivery, the MO-2136 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2137 - Transmission oil, CAT TO-4, SAE 30

If, but only if, the Tenderer wishes to place a bid for the MO-2137 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.47.a | The MO-2137 product shall be of viscosity grade SAE 30 (when classified in accordance with SAE J300). | **M** | Y/N |  |  |  |
| 2.3.47.b | The MO-2137 product shall meet the requirements of Caterpillar specification TO-4 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.47.c | The Supplier shall offer MO-2137 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.47.d | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.47.e | On the Date of Delivery, the MO-2137 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2139 - Lubricating oil, gear, MB 235.11, SAE 75W-90

If, but only if, the Tenderer wishes to place a bid for the MO-2139 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.48.a | The MO-2139 product shall be of viscosity grade SAE 75W-90 (when classified in accordance with SAE J306). | **M** | Y/N |  |  |  |
| 2.3.48.b | The MO-2139 product shall meet the requirements associated with American Petroleum Institute Lubricant Service Designations for Automotive Manual Transmissions, Manual Transaxles, and Axles - Service Designation API GL-4, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.48.c | The MO-2139 product shall have Mercedes-Benz MB-approval 235.11 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.48.d | The Supplier shall offer MO-2139 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.48.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.48.f | On the Date of Delivery, the MO-2139 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2140 - Automatic Transmission Fluid, Allison TES 295

If, but only if, the Tenderer wishes to place a bid for the MO-2140 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.49.a | The MO-2140 product shall be an Allison approved TES 295 automatic transmission fluid or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.49.b | The Supplier shall offer MO-2140 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.49.c | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.49.d | On the Date of Delivery, the MO-2140 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2146 – Environmentally Acceptable Lubricant ISO VG 68, thrusters

If, but only if, the Tenderer wishes to place a bid for the MO-2146 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.50.a | The MO-2146 product shall have a kinematic viscosity at 40 °C of minimum 61.2 and maximum 74.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 68, when classified in accordance with ISO 3448. |  |  |
| 2.3.50.b | The MO-2146 product shall be an Environmentally Acceptable Lubricant (EAL) in accordance with US EPA Vessel General Permit 2013. | **M** | Y/N |  |  |  |
| 2.3.50.c | The MO-2146 product shall be approved for Rolls-Royce TT-range of Thrusters in accordance with Approved Oil List, Document ID DMN000238796, Marine Services Propulsion Ulsteinvik, or equivalent. | **M** | Y/N |  |  |  |
| 2.3.50.d | Shall be an approved EAL product for Brunvoll Thruster Units in accordance with “Chart of lubricants oil types for Brunvoll Tunnel and Azimuth Thrusters” (document ID 778296J) or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.50.e | The Supplier shall offer MO-2146 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.50.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.50.g | On the Date of Delivery, the MO-2146 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2148 – Lubricating oil, gear, SAE 75W-140, STO 2:0A

If, but only if, the Tenderer wishes to place a bid for the MO-2148 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.51.a | The MO-2148 product shall be formulated with fully synthetic base oil. | **M** | Y/N |  |  |  |
| 2.3.51.b | The MO-2148 product shall be of viscosity grade SAE 75W-140 (when classified in accordance with SAE J306). | **M** | Y/N |  |  |  |
| 2.3.51.c | The MO-2148 product shall be either recommended and approved oil or technically confirmed oil for the Scania STO 2:0A specification. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.51.d | The Supplier shall offer MO-2148 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.51.e | The Supplier shall offer MO-2148 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.51.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.51.g | On the Date of Delivery, the MO-2148 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2200 - Lubricating oil, air compressor, ISO VG 32

If, but only if, the Tenderer wishes to place a bid for the MO-2200 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.52.a | The MO-2200 product shall be formulated with base oil based on Group II, III and/or IV base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.52.b | The MO-2200 product shall meet the requirements of DIN 51506 VDL or equivalent. | **M** | Y/N |  |  |  |
| 2.3.52.c | The MO-2200 product shall have a kinematic viscosity at 40 °C of minimum 28.8 and maximum 35.2 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 32, when classified in accordance with ISO 3448. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.52.d | The Supplier shall offer MO-2200 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.52.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.52.f | On the Date of Delivery, the MO-2200 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2201 - Lubricating oil, air compressor, ISO VG 46

If, but only if, the Tenderer wishes to place a bid for the MO-2201 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.53.a | The MO-2201 product shall be formulated with base oil based on Group II, III and/or IV base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.53.b | The MO-2201 product shall meet the requirements of DIN 51506 VDL or equivalent. | **M** | Y/N |  |  |  |
| 2.3.53.c | The MO-2201 product shall have a kinematic viscosity at 40 °C of minimum 41.4 and maximum 50.6 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 46, when classified in accordance with ISO 3448. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.53.d | The Supplier shall offer MO-2201 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.53.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.53.f | On the Date of Delivery, the MO-2201 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2202 - Lubricating oil, air compressor, ISO VG 68

If, but only if, the Tenderer wishes to place a bid for the MO-2202 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.54.a | The MO-2202 product shall be formulated with base oil based on Group II, III and/or IV base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.54.b | The MO-2202 product shall meet the requirements of DIN 51506 VDL or equivalent. | **M** | Y/N |  |  |  |
| 2.3.54.c | The MO-2202 product shall have a kinematic viscosity at 40 °C of minimum 61.2 and maximum 74.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 68, when classified in accordance with ISO 3448. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.54.d | The Supplier shall offer MO-2202 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.54.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.54.f | On the Date of Delivery, the MO-2202 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2211 - Lubricating oil, air compressor, ISO VG 100

If, but only if, the Tenderer wishes to place a bid for the MO-2211 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.55.a | The MO-2211 product shall be formulated with base oil based on Group II, III and/or IV base oil as classified in accordance with American Petroleum Institute, API 1509 Appendix E or equivalent. | **M** | Y/N | Group I base oil as part of the additive package (e.g. used for solvency) is allowed. |  |  |
| 2.3.55.b | The MO-2211 product shall meet the requirements of DIN 51506 VDL or equivalent. | **M** | Y/N |  |  |  |
| 2.3.55.c | The MO-2211 product shall have a kinematic viscosity at 40 °C of minimum 90 and maximum 110 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 100, when classified in accordance with ISO 3448. |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.55.d | The Supplier shall offer MO-2211 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.55.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.55.f | On the Date of Delivery, the MO-2211 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2300 - Lubricating oil, biodegradable, chain saw

If, but only if, the Tenderer wishes to place a bid for the MO-2300 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.56.a | The MO-2300 product shall be formulated with vegetable oil (e.g. rapeseed oil) based base oil. | **M** | Y/N |  |  |  |
| 2.3.56.b | The MO-2300 product shall include a tackifier additive in its formulation. | **M** | Y/N |  |  |  |
| 2.3.56.c | The MO-2300 product shall have a kinematic viscosity at 40 °C of minimum 41.4 and maximum 75.8 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N |  |  |  |
| 2.3.56.d | The MO-2300 product shall have a viscosity index (as defined by ASTM D2270) of minimum 220. | **M** | Y/N |  |  |  |
| 2.3.56.e | The MO-2300 product shall have a flash point of minimum 230 °C, when measured in accordance with ASTM D92 or equivalent method. | **M** | Y/N |  |  |  |
| 2.3.56.f | The MO-2300 product shall have a pour point of maximum -30 °C, when measured in accordance with ASTM D97 or equivalent method. | **M** | Y/N |  |  |  |
| 2.3.56.g | The MO-2300 product shall be readily biodegradable, as per OECD 301B and/or OECD 301F or equivalent method. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.56.h | The Supplier shall offer MO-2300 in a packaging size of minimum 1 US quart and maximum 1 litre (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.56.i | The Supplier shall offer MO-2300 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.56.j | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.56.k | On the Date of Delivery, the MO-2300 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2310 - Heat transfer oil

If, but only if, the Tenderer wishes to place a bid for the MO-2310 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.57.a | The MO-2310 product shall have a viscosity at 40 °C between 19 and 30 mm2/s (when measured in accordance with the method ISO 3104 or equivalent). | **M** | Y/N |  |  |  |
| 2.3.57.b | The MO-2310 product shall meet the requirements of DIN 51522 (Heat transfer fluid DIN 51522 – Q) or equivalent. | **M** | Y/N |  |  |  |
| 2.3.57.c | The MO-2310 product shall have an autoignition temperature of minimum 325 °C (as measured in accordance with DIN 51794 or equivalent). | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.57.d | The Supplier shall offer MO-2310 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.57.e | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.57.f | On the Date of Delivery, the MO-2310 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MO-2342 – Environmentally Acceptable Lubricant ISO VG 100, Stern Tube

If, but only if, the Tenderer wishes to place a bid for the MO-2342 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.58.a | The MO-2342 product shall have a kinematic viscosity at 40 °C of minimum 90 and maximum 110 mm2/s, when measured in accordance with ISO 3104 or equivalent method. | **M** | Y/N | In other words, the product shall be of viscosity grade ISO VG 100, when classified in accordance with ISO 3448. |  |  |
| 2.3.58.b | The MO-2342 product shall be an Environmentally Acceptable Lubricant (EAL) in accordance with US EPA Vessel General Permit 2013. | **M** | Y/N |  |  |  |
| 2.3.58.c | The MO-2342 product shall be an approved emulsifying Environmentally Acceptable Lubricant (EAL) for stabilizer crux bearings, fin bearings and stabilizers with vane units in accordance with Rolls-Royce Service Bulletin, Doc. ID R-062224 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.58.d | The MO-2342 product shall be an approved biodegradable, emulsifying oil for both “All purpose”, “Continuous arctic <5 °C” and “Continuous tropical >25 °C” climate zones for MAN type VB and VBS propeller systems in accordance with MAN Diesel & Turbo, Propeller lub oil spec – common systems, Item ID 2148085-8 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.58.e | The Supplier shall offer MO-2342 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.58.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.58.g | On the Date of Delivery, the MO-2342 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MS-6000 - Windscreen washer fluid

If, but only if, the Tenderer wishes to place a bid for the MS-6000 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.59.a | The MS-6000 product shall be a ready-to-use windscreen washer fluid (not concentrate). | **M** | Y/N |  |  |  |
| 2.3.59.b | The MS-6000 product shall be based on alcohols, detergent and demineralised water. | **M** | Y/N |  |  |  |
| 2.3.59.c | The MS-6000 product shall have a freezing point of minus 21 °C or lower. | **M** | Y/N |  |  |  |
| 2.3.59.d | The MS-6000 product shall be blue in colour. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.59.e | The Supplier shall offer MS-6000 in a packaging size of minimum 1 US gallon and maximum 5 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.59.f | The Supplier shall offer MS-6000 in a packaging size of minimum 50 litres and maximum 60 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.59.g | The Supplier shall offer MS-6000 in intermediate bulk containers (IBC) of minimum 900 litres and maximum 1100 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.59.h | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |

### Requirements for MS-6001 - Engine coolant concentrate (anti-freeze)

If, but only if, the Tenderer wishes to place a bid for the MS-6001 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.60.a | The MS-6001 product shall be a standard engine coolant concentrate (or “antifreeze”) based on ethylene glycol (ethane-1,2-diol) and corrosion inhibitors. | **M** | Y/N |  |  |  |
| 2.3.60.b | The MS-6001 product shall contain no amines, nitrites or phosphates. | **M** | Y/N |  |  |  |
| 2.3.60.c | The MS-6001 product shall meet the requirements of British Standard BS 6580 or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.60.d | The Supplier shall offer MS-6001 in a packaging size of minimum 10 litres and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.60.e | The Supplier shall offer MS-6001 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.60.f | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.60.g | On the Date of Delivery, the MS-6001 product shall neither be older than 18 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |

### Requirements for MS-6050 - Engine coolant concentrate (anti-freeze), OAT

If, but only if, the Tenderer wishes to place a bid for the MS-6050 product, the following requirements apply:

| **Id. No.** | **Requirement description** | Classification | Documentation | **DALO remarks** | Requirement compliance | **Tender description** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Properties and composition** |  |  |  |  |  |
| 2.3.61.a | The MS-6050 product shall be an engine coolant concentrate (or “antifreeze”) based on ethylene glycol (ethane-1,2-diol) and Organic Acid Technology (OAT) corrosion inhibitors. | **M** | Y/N |  |  |  |
| 2.3.61.b | The MS-6050 product shall contain no amines, nitrites, phosphates, borates or silicates. | **M** | Y/N |  |  |  |
| 2.3.61.c | The MS-6050 product shall meet the requirements of ASTM D3306 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.61.d | The MS-6050 product shall meet the requirements of ASTM D6210 or equivalent. | **M** | Y/N |  |  |  |
| 2.3.61.e | The MS-6050 product shall meet the requirements of Volkswagen specification VW TL 774F (G12+) or equivalent. | **M** | Y/N |  |  |  |
|  | **Packaging sizes** |  |  |  |  |  |
| 2.3.61.f | The Supplier shall offer MS-6050 in a packaging size of minimum 5 US gallon and maximum 20 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.61.g | The Supplier shall offer MS-6050 in drums of minimum 200 litres and maximum 210 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
| 2.3.61.h | The Supplier shall offer MS-6050 in intermediate bulk containers (IBC) of minimum 900 litres and maximum 1100 litres (volume of product). | **M** | Y/N  DS | The Supplier shall state the offered packaging size (volume of product) on the price list (i.e. Appendix C.1). |  |  |
|  | **Human health and environmental hazards** |  |  |  |  |  |
| 2.3.61.i | The product shall comply with the requirements set by Sub-Appendix A.1. | **M** | Y/N |  |  |  |
|  | **Shelf life** |  |  |  |  |  |
| 2.3.61.j | On the Date of Delivery, the MS-6050 product shall neither be older than 24 months (counting from the Date of Manufacture or - for packed goods - Date of Filling) nor have less than 50% of the Supplier’s recommended maximum shelf life remaining. | **M** | Y/N |  |  |  |