ADDITIONAL PACKING, PACKAGING, AND/OR MARKING REQUIREMENTS

1. **MATERIALS:** Lubricants and special purpose oils

2. **RANGE OF MATERIALS:** Saudi Aramco Materials covered in materials services group 149000, for the above materials description, and direct charge purchase items of the same kind.

3. **REQUIREMENTS:** These requirements are in addition to those in the material master descriptions, and Saudi Aramco Standard Packing Specifications and apply only to the materials indicated. Deviation from these requirements is not allowed without the Buyer's written approval.

3.1 Drums: When required as a purchase order provision, drums shall be configured as follows:

   3.1.1 The drums shall have a standard liquid capacity of 210 liters, 55 gallons (U.S.), or an equivalent standard capacity as set out in the purchase order, unless designated otherwise in the purchase order.

   3.1.2 The drums shall be a new, returnable/reusable metal type. All components shall be fabricated from 18-gauge (minimum) cold-rolled carbon steel. The flanges and closures (plugs and bungs) are to be industry standard use, 18.75-mm (3/4-inch) and 50-mm (2-inch) size fittings, in conformance with United States Department of Transportation (DOT) standard 17E, or International Maritime Organization (IMO) equivalent or superior other standards. Drums fabricated from any petrochemical or other man-made plastic material are **not** acceptable.

   3.1.3 The closure fittings shall be provided metal over-cap protection devices that are designed to be tamper-resistant and that positively indicate removal or opening. The closure fittings are to be sealable to prevent leaks and to preclude entry of any foreign material when the drum is in any position.
3.1.4 Drums for greases, in addition to the requirements of paragraphs 3.1.1 and 3.1.2, shall have an industry standard use, removable drumhead with a positive clamping ring and locking device, in conformance with DOT standard 17H, or IMO equivalent or other superior standards. The clamping ring shall be factory-sealed for product quality assurance. The drumhead is to be equipped with an industry standard use 50-mm (2-inch) closure plug, a vent cap, and metal over-cap devices designed to be tamper-resistant and to positively indicate removal or opening.

3.2 Pails/cans: When required as a purchase order provision, pails shall be configured as follows:

3.2.1 The pails/cans shall have a capacity of 18 kilograms, 35 pounds, 20 liters, or 5 gallons (U.S.), or as specified in the purchase order. Special purpose oils are to be packaged in industry standard use, closed-head type, new pails/cans, in conformance with DOT standard 37B, or IMO equivalent or superior other standards. Grease is to be packaged in industry standard use, lug-cover, open-head type, new pails, in conformance with DOT standard 37C, or IMO equivalent or superior other standards. The top and bottom of the pails/cans for these products shall be configured for safe stacking, and each pail/can shall be fitted with an industry standard use wire bale or carrying handle. Pails/cans fabricated from any petrochemical or other man-made plastic material must be ultraviolet- (UV) resistant and must pass the relevant DOT "3 meter drop" test.

3.2.2 Closed-head, special purpose oil pails/cans shall be constructed to include a pouring spout, retractable for pail-stacking purposes, with a metal closure device and with a metal over-cap device to prevent product leakage and to prevent entry of foreign material.

3.2.3 Open-head grease pails shall have a nonrigid, flowed-in gasket seal for rapid and easy removal and resealing of the pail cover.

3.3 Product identification and labeling: Unless deviation is authorized in writing by the Buyer, the following minimum requirements apply:

3.3.1 Any color for the container is acceptable except black. All exterior surfaces of the container shall be resistant to corrosion and other surface deterioration resulting from exposure to sunlight, moisture, heat, industrial fumes, and/or dust for a minimum of 4 years.
3.3.2 Markings shall include:

a. Saudi Aramco Materials Master number.

b. Saudi Aramco material name.

c. Location and fill date of the container and, if appropriate, date of shelf-life expiration.

d. Manufacturer's batch number.

e. Manufacturer's or blender's name and identification information.

f. Saudi Aramco purchase order number.

g. Total net amount of contents stated in standard units of measurement (liters, gallons, kilograms, pounds, etc.).

h. Other data required for safe handling, transport, and storage.

3.3.3 The markings must be placed on the top and side of each container. The markings on the top should be in the center and those on the side should be approximately in the center of the vertical distance from top to bottom.

3.3.4 For drums, the size of the markings shall be:

a. Saudi Aramco Materials Master number and Saudi Aramco material name: 35 mm (1-1/2 inches) high and of sufficient thickness to be easily read.

b. Remaining markings shown in paragraph 3.3.2: 25 mm (1 inch) high and of sufficient thickness to be easily read.

3.3.5 For pails/cans, the size of the markings shall be:

a. Saudi Aramco Materials Master number and Saudi Aramco material name: 25 mm (1 inch) high and of sufficient thickness to be easily read.

b. Remaining markings shown in paragraph 3.3.2: 12 mm (1/2 inch) high and of sufficient thickness to be easily read.

3.3.6 Other manufacturer markings and labeling is permitted as necessary.
3.3.7 The markings shall be easily read and in contrasting color to that of the container. The markings applied shall be appropriate to the size and shape of the container and must be applied so as to remain legible after exposure to sunlight, moisture, heat, industrial fumes, and/or dust for a minimum of 4 years.

3.3.8 HAZARDOUS MATERIALS SHALL BE LABELED OR MARKED IN CONFORMANCE WITH INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA), INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO), INTERNATIONAL MARITIME ORGANIZATION (IMO), SAUDI ARABIAN STANDARDS ORGANIZATION (SASO), UNITED STATES DEPARTMENT OF TRANSPORTATION (DOT), AND/OR ANY OTHER GOVERNMENT OR TRADE ORGANIZATION REGULATIONS OR REQUIREMENTS THAT MAY APPLY.