



Sri Lanka Standards on Lubricant Industry

By

M S S Fernando

Director (Engineering)

Sri Lanka Standards Institution

FORMULATION OF SRI LANKA STANDARDS(SLS) FOR LUBRICANTS

- Started in year 2007 with Gasoline (Petrol) Engine oil.
- Analysis of vehicle population (statistics provided by DMT and Dept.of Census & Statistics).
- Sponsored by Ministry of Petroleum and Petroleum Resource Development

SLS 1374 - SPECIFICATION FOR CRANK CASE LUBRICATING OILS FOR INTERNAL COMBUSTION GASOLINE ENGINES

- **Scope**

This standard prescribes requirements and methods of sampling and testing for types of lubricating oil suitable for the crankcase lubrication of spark ignition engines (petrol engines) of passenger cars, light duty trucks and heavy duty trucks that operate under the API Service Category SJ as defined by API 1509.

This standard may also apply to lubricants used in spark ignition engines for stationary appliances such as generators, compressors and pumps wherever so recommended by the manufacturer or adopted by the user.

REQUIREMENTS

- a) Base oil categories - Group 1, Group 2, Group 3 or Group 4
- b) Viscosity Grade – (Table 1)
- c) Engine test performance (Table 2)
- d) Physico-chemical and other bench test requirements (Table 3)
- e) Stability (SLS ASTM D6922)
- f) Compatibility(SLS ASTM 6922)

LUBRICATING OIL APPROVAL

- Conformity to performance characteristics (Table 2) and Physico-chemical and other bench test requirements (Table 3) of the prototype formulation.
- Acceptable correlation between the identification properties of the lubricant oil submitted for approval and those of the prototype formulation (Table 4).

PACKING

- The material shall be packed in metal or any other suitable containers.

MARKING

- Type and grade of oil
- Manufacturer's name or trade mark if any
- Net mass/volume of the material
- Identification in code or otherwise to enable the lot of consignment of manufacture to be traced back from records.

SLS 1373 - SRI LANKA STANDARD SPECIFICATION FOR CRANK CASE LUBRICATING OILS FOR INTERNAL COMBUSTION DIESEL ENGINES

- **SCOPE**

This standard prescribes requirements and methods of sampling and testing for types of lubricating oil suitable for the crankcase lubrication of light duty and heavy duty naturally aspirated, turbo-charged or supercharged compression ignition engines (diesel engines) of passenger cars, light duty trucks and heavy duty trucks that operate under the API Service Category CF as defined by API 1509.

This standard may also apply to lubricants used in compression-ignition engines for stationary appliances such as generators, compressors and pumps wherever so recommended by the manufacturer or adopted by the user.

SLS 1396 : SRI LANKA STANDARD SPECIFICATION FOR GEAR LUBRICANTS (EXTREME PRESSURE GEAR OIL)

- **SCOPE**

This Standard prescribes the requirements and methods of sampling and testing for multipurpose automotive gear lubricating oil (extreme pressure type) that operate under the API Service Category GL-4.

The lubricant is primarily intended for use in automotive hypoid gear units, manual transmissions, final drives, steering gears and fluid lubricated universal joints of automotive equipment.

SLS 1409 : Sri Lanka Standard Specification for Four-Stroke Motor Cycle Gasoline Engine Lubricating Oils

- **Scope**

This Standard prescribes the requirements and methods of sampling and testing for lubricating oils to be used in four-stroke cycle spark ignition gasoline engines employing a common sump containing lubricating oil for both the engine and associated drive-train (Transmission , clutch, starter) of motorcycles, motor scooters, all terrain vehicles (ATV) and related equipment that operate under the API service category SG.

Requirements

- Viscosity Grade
- Physico-Chemical and other bench test requirements
- Performance level (API SG)
- Stability
- Compatibility

SLS 1424 : Sri Lanka Standard Specification for Grease for General Automotive and Other Applications

- **Scope**

This Standard prescribes the requirements and method of sampling and testing for lubricating grease suitable for general automotive and other applications

SLS 1446 : Sri Lanka Standard Specification for Two-Stroke Cycle Gasoline Engine Lubricating Oil

- **Scope**

This Standard prescribes the requirements and methods of sampling and testing for type of lubricating oil suitable for two-stroke, spark ignition, air cooled gasoline engines such as mopeds, scooters, motor cycles etc that operate under JASO Service Category FC

Requirements

- Performance Index (Lubricity, Initial Torque, Detergency, Smoke property, Smoke system blocking property)
- Physico-chemical properties
- Stability
- Compatibility



THANK YOU!