

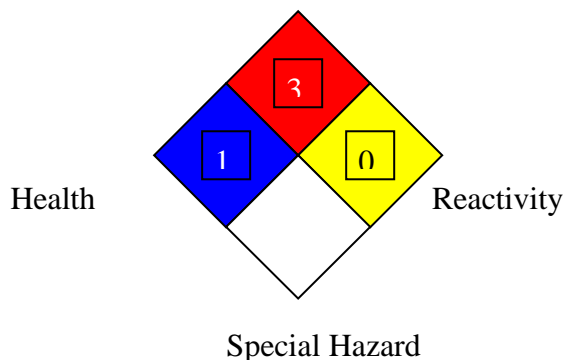


Jordan Petroleum Refinery Company

Material Safety Data Sheet

AMOON 15W/40

NFPA: Flammability



JPRC LUB-16

HMIS III:

Flammability	3
Health	1
Reactivity	0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	AMOON 15W/40
MSDS Number:	JPRC LUB-16
Product Use Description:	AMOON Diesel Engine Oil is recommended for all heavy duty automotive diesel engines, where the requirements call for API CH4 rated oil. It could also be used where performance requirements dictate the use of MB 228.1, ACEA E2 and Mack-EO-M type lubricants.
Company	Jordan Petroleum Refinery Amman – Jordan. TEL: + 962 6 4630151 or 4657600 FAX: + 962 6 4657934 or 4657939 P.O.BOX: 3396 Amman 11181 – Jordan P.O.BOX: 1079 Amman 11118 – Jordan Website: http://www.jopetrol.com.jo E-mail: addewan@jopetrol.com.jo

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS.

COMPOSITION :	SN-500
	SN-150
	DI package
	VII
	PPD
	TBN Booster

SECTION 3. HAZARDS IDENTIFICATION

Hazardous identification

US OSHA hazard communication standard for (SN-500, SN-150):

product assessed in accordance with OSHA 29 CFR 1910.1200 & determined to be hazardous

Effects of over exposure: no significant effects expected.

Emergency response data: black semi – solid. Dot ERG NO.- NA

SECTION 4. FIRST AID MEASURES

First Aid Measures:

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Skin contact

Wash contact areas with soap & water. Remove contaminated clothing. Get medical attention if irritation developed. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

Inhalation

Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.

Ingestion

Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Fire- Fighting Measure

Extinguishing media:

Carbon dioxide, foam, dry chemical, and water fog.

Special fire fighting procedures:

Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water

Special protective equipment:	supply. Water may cause splattering. For fires in enclosed areas, fire fighters must use self-contained breathing apparatus (SCBA) and full turnout gear.
Unusual fire and explosion hazards	Storage tank headspace may contain flammable atmosphere.
NFPA hazard ID	Flammable limits- LEL: NA, UEL: NA. Health : 3, Flammability : 1, Reactivity : 0
Hazardous decomposition products	Carbon monoxide, carbon dioxide, some metallic oxides.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures	<p>This material is slippery might cause traffic accident. If split on road, it must be covered with sand immediately. In the event of a spill or leak or accident person not wearing protective equipment & clothing should be restricted from contaminated areas until clean up has been completed.</p> <p>the following steps should be undertaken following a spill or leak:</p> <ol style="list-style-type: none"> 1- Notify safety personnel. 2- Remove all sources of heat and ignition. 3- Ventilate potentially explosive atmospheres. 4- Do not touch the spilled material; stop the leak if it is possible to do so without risk. 5- Use water spray to reduce vapors; do not get water inside container. Do not flush waste to sewers or open waterways. 6- For liquid spills, cover with sand and then remove for later disposal. 7- Prevent spills from entering storm sewers or drains.
Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (see section 8). Follow all fire-fighting procedures.

SECTION 7. HANDLING AND STORAGE

Handling:	Open container in a well ventilated area. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Store away from strong oxidizing agents or combustible material.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls/ personal protection

Respiratory protection	Use full face respirator with a combination organic vapor and dust / mist cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.
Clothing Recommendation:	Long sleeve shirt is recommended. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.
Hands	Use chemical resistant apron and / or other clothing to protect against hot liquid & to avoid skin contact. Nitrile.
Eyes	Safety goggles are considered minimum protection. goggles with a face shield may be necessary depending on quantity of material & conditions of yours. Safety glasses.
Engineering controls	Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.

Occupational exposure limits

Ingredient name: ACGIH STEL : 10 mg/m³
Mineral oil (HITEC 8744B, HITEC 611, OSHA PEL : 5 mg/m³
HITEC 5748)
Exposure limit of SN 500, SN 150 for oil mist: 5.00 mg/m³

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance:	Bright and Clear,
Flash point for 15W/40 (COC):	220 ° C
Pour Point for 15W/40:	-27 ° C
BN for 15W/40:	11.2 mg KOH/g
Sulfated Ash WT% for 15W/40:	1.40
Density for 15W/40:	0.8863 g/cm ³ @ 15 ° C Test Method: ASTMD 1298
Kinematic viscosity for 15W/40 :	14.2 g/cm ³ @ 100 ° C Test Method: ASTMD 1298
VI for 15W/40:	138

SECTION 10. STABILITY AND REACTIVITY

Stability: The product is stable.

Material to avoid: Strong oxidizing and reducing agents.
Acids. Halogens and halogenated compounds.

Condition to avoid: High temperatures, sparks, and open flames.

Thermal Decomposition: Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be formed: calcium, phosphorus, sulfur, zinc.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Effects

Inhalation

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil.

Ingestion

Not determined.

Skin contact

Non-irritating to the skin. Repeated or prolonged skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

Eye contact

Irritating to eyes.

LD₅₀ Dermal Toxicity

>2000 mg/kg

LD₅₀ Oral Toxicity

>5000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Environmental Hazards
(SN-150,SN-500)

Harmful to aquatic organisms. May cause long- term adverse effects in the aquatic environment. Based on calculation.

Environmental Fate
(SN-150,SN-500)

This product contains components which may be persistent in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal

Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the resource conservation and recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA Information

The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40CFR, Part 261D), nor is not formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosively, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

SECTION 14. REGULATORY INFORMATION

Risk Phrases:
(LZ-4980A)

R38-Irritating to skin.

R41-Risk of serious damage to eye.

R50/53-Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53-Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

R52- Harmful to aquatic organisms.

R62-Possible risk of impaired fertility.

SECTION 15. OTHER INFORMATION

LD₅₀

Lethal Dose (mg/kg)

PEL

Permissible Exposure Limits

NFPA

National Fire Protection Association:

PPE
SCBA
TWA
OSHA

ACGIH

Personal Protective Equipment
Self – Contained Breathing Apparatus
Time – Weighted Average.
Occupational Safety And Health
Administration
American Conference of
Governmental Industrial Hygienists