11310 + 11309 ULTRA LUBE (487210) 7497210-00 L/M ¶ MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: L/M ULTRA LUBE (487210)

SUPPLIER: EXXON MOBIL CORPORATION

3225 GALLOWS RD. FAIRFAX, VA 22037

24 - Hour Health and Safety Emergency (call collect): 609-737-4411 24 - Hour Transportation Emergency (Primary) CHEMTREC: 800-424-9300

(Secondary) 281-834-3296

Product and Technical Information:

Lubricants and Specialties: 800-662-4525 800-443-9966

Fuels Products: 800-947-9147 MSDS Fax on Demand: 613-228-1467

MSDS Internet Website: http://emmsds.ihssolutions.com/

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: BASE OIL AND ADDITIVES GLOBALLY REPORTABLE MSDS INGREDIENTS:

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

This product is considered hazardous according to regulatory guidelines (See Section 15).

EMERGENCY OVERVIEW: Black Grease. DOT ERG No.: NA POTENTIAL HEALTH EFFECTS: Causes eye and skin irritation. Excessive exposure may result in respiratory irritation.

For further health effects/toxicological data, see Section 11.

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Instill local anesthetic eyedrops to facilitate irrigation, if available.

SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Wash carefully behind ears, under nails and in skin folds. Get medical assistance. For those providing assistance, avoid further skin contact to yourself and others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated clothing articles that cannot be laundered. INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should

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be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INHALATION: Not expected to be a problem. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation.

INGESTION: Seek medical advice. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

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 supply.

SPECIAL PROTECTIVE EQUIPMENT: Product health hazards may require personal protective equipment in addition to that normally worn (see MSDS sections on special protection information and special precautions). For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(F): > 180(356) (ESTIMATED FOR OIL, ASTM D-92 (COC)). Flammable Limits (approx.% vol.in air) - LEL: NE, UEL: NE NFPA HAZARD ID: Health: 2, Flammability: 1, Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of adsorbed residues as directed in Section 13. WATER SPILL: Confine the spill immediately with booms. Warn other ships in the vicinity. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: High pressure injection under the skin may occur due to the rupture of pressurized lines. Always seek medical attention. Avoid contact with eyes. Avoid contact with skin. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

SPECIAL PRECAUTIONS: Prevent small spills and leakages to avoid slip hazard.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

This product does not contain any components which have recognized exposure limits.

VENTILATION: Use adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Chemical type goggles must be worn.

SKIN PROTECTION: Protective clothing such as uniforms, coveralls or lab coats should be worn. Impervious gloves should be worn. Chemical resistant apron should be worn when handling bulk quantities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Grease

COLOR: Black ODOR: Mild

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): NE DROP POINT C(F): NE

FLASH POINT C(F): > 180(356) (ESTIMATED FOR OIL, ASTM D-92 (COC))

FLAMMABILITY (solids): NE AUTO FLAMMABILITY C(F): NA EXPLOSIVE PROPERTIES: NA

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OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-month 20 C: < 0.1

VAPOR DENSITY: NE EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 0.912 SOLUBILITY IN WATER: Negligible PARTITION COEFFICIENT: > 3.5 VISCOSITY AT 40 C, cst: > 20.0

VISCOSITY AT 100 C, cst: NE

POUR POINT C(F): NE FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: NE

NOTE: MOST PHYSICAL PROPERTIES FOR OIL COMPONENT.

DMSO EXTRACT, IP-346 (WT.%): <3, for mineral oil only

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID: Extreme heat and high energy sources of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

- ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
- DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
- EYE IRRITATION (RABBITS): Strong irritant. (Draize score: greater than 35 but 55 or less). ---Based on testing of similar products and/or the components.
- SKIN IRRITATION (RABBITS): Strong irritant. (Primary Irritation Index: 5 or greater but less than 6). --- Based on testing of similar products and/or the components.
- OTHER ACUTE TOXICITY DATA: Although an acute inhalation study was not performed with this product, a variety of mineral oils and synthetic base oils, such as those in this product have been tested. These samples had virtually no effect other than a nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed effects.
 - --- SUBCHRONIC TOXICOLOGY (SUMMARY) ---
- No significant adverse effects were found in studies using repeated dermal applications of similar formulations to the skin of laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The

animals were evaluated extensively for effects of exposure (hematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.).

--- REPRODUCTIVE TOXICOLOGY (SUMMARY) ---

No teratogenic effects would be expected from dermal exposure, based on laboratory developmental toxicity studies of major components in this formulation and/or materials of similar composition.

---CHRONIC TOXICOLOGY (SUMMARY)---

Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract. For mineral base oils: Base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects. These results are confirmed on a continuing basis using various screening methods such as Modified Ames Test, IP-346, and/or other analytical methods. For synthetic base oils: The base oils in this product have been tested in the Ames assay and other tests of mutagenicity with negative results. These base oils are not expected to be carcinogenic with chronic dermal exposures.

---SENSITIZATION (SUMMARY)---

Not expected to be sensitizing based on tests of this product, components, or similar products.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

This environmental assessment was conducted using information on the individual components as no test data was available for this specific formulation.

ECOTOXICITY: The major components in the formulation show no aquatic toxicity at 1000 mg/L loading, therefore long-term adverse effects in the aquatic environment are not expected.

MOBILITY: Not established.

PERSISTENCE AND DEGRADABILITY: This product is expected to be inherently biodegradable, as the principal components have been shown to degrade at slow to moderate rates.

BIOACCUMULATIVE POTENTIAL: Not established.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value. 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 (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT. RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EU Labeling: Product is dangerous as defined by the European Union Dangerous Substances/Preparations Directives.

Symbol: Xi Irritant. Risk Phrase(s): R36/38.

Irritating to eyes and skin.

Safety Phrase(s): 524/25-36.

Avoid contact with skin and eyes. Wear suitable protective clothing.

Contains: Zinc Dithiophosphate.

Governmental Inventory Status: All components comply with TSCA.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:

ACUTE

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
LITHIUM-SOAP THICKENER	(5.65%) 7620~77-1	22
regulatory lists searched		
1=ACGIH ALL 6=IARC 1	11=TSCA 4 16=CA P65	CARC 21=LA RTK
2=ACGIH A1 7=IARC 2A	12=TSCA 5a2 17=CA P65	REPRO 22=MI 293
3=ACGIH A2 8≃IARC 2B	13=TSCA 5e 18=CA RTK	23=MN RTK
4=NTP CARC 9=OSHA CARC	14=TSCA 6 19=FL RTK	24=NJ RTK
5=NTP SUS 10=OSHA Z	15=TSCA 12b 20=IL RTK	25=PA RTK
		OC-DT DEEC

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

16. OTHER INFORMATION

USE: GREASE

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

Precautionary Label Text:

CONTAINS ZINC DITHIOPHOSPHATE

WARNING!

CAUSES EYE AND SKIN IRRITATION. EXCESSIVE EXPOSURE MAY RESULT IN RESPIRATORY IRRITATION.

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Avoid contact with eyes, skin, and clothing. Keep container closed. FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Wash skin with soap and plenty of water. Remove contaminated clothing.

Refer to product Material Safety Data Sheet for further safety and health information.

For Internal Use Only: MHC: 1* 1* 1* 3* 3*, MPPEC: D. TRN: 7487210-00, CMCS97: 97R841, REQ: PS+C, SAFE USE: L

EHS Approval Date: 030CT2001 *******************

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