

15-JAN-09
Osyris 6408 S

To Whom It May Concern:

As you requested, attached is a copy of a Material Safety Data Sheet covering (our ref. no. 202163) Osyris 6408 S.

Title III of the Superfund Amendments and Reauthorizations Act (SARA) requires chemical suppliers of mixtures and trade name products to provide information to their customers sufficient for them to comply with the requirements of Section 313.

Material Safety Data Sheets (MSDS's) have been updated to include the section 313 information.

Erick Aho
Chemist

MATERIAL SAFETY DATA SHEET FOR Osyris 6408 S

TOTAL Lubricants USA, Inc.
Airport Road
Rockingham NC 28379-1058

REVISION DATE
14-MAY-08

DATE ISSUED
15-JAN-09

IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME: Osyris 6408 S	PRODUCT #: 202163
CHEMICAL NAME: N/A - Mixture	CAS #'S: Mixture
PRODUCT APPEARANCE AND ODOR: Amber liquid, mild odor	CHEMICAL FAMILY: N/A - Mixture
SYNONYMS: Weapons lubricant	EMERGENCY TELEPHONE: 910-997-5086

COMPONENTS AND HAZARD INFORMATION

COMPONENTS:	W/W	HAZARD DATA (TLV, LD50, LC50, ETC.):
Petroleum based lubricating oil CAS# 64742-52-5, 64742-53-6		TLV 5 mg/m3 (OSHA/ACGIH) (as an oil mist)
Aliphatic hydrocarbons CAS # 64742-88-7		PEL 300 ppm (OSHA)
Calcium sulfonate additive CAS # n/a (mixture)	n/e	
Metalworking additive CAS # n/a (mixture)	n/e	
Calcium dinonylnaphthalenesulfonate CAS # 57855-77-3	n/e	

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

Health	Flammability	Reactivity
1	1	0

TRANSPORTATION INFORMATION

TRANSPORTATION INFORMATION:

DOT PROPER SHIPPING NAME:
Combustible Liquid, N.O.S. (Petroleum distillate), NA 1993, PG III

DOT HAZARD CLASS: Combustible Liquid

DOT IDENTIFICATION NUMBER: NA 1993

NAME: COMBUSTIBLE LIQUID, N.O.S.

EMERGENCY FIRST AID

EYE CONTACT:
If splashed into the eyes, flush with clear water for 15 minutes or until

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EMERGENCY FIRST AID

irritation subsides. If irritation persists, call a physician.

SKIN CONTACT:

In case of skin contact, remove contaminated clothing and wash skin thoroughly with soap and water.

INHALATION:

If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen, if available.

INGESTION:

If ingested, DO NOT induce vomiting; call a physician immediately. Possible aspiration hazard.

FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT (MINIMUM):
Approx. 205°F C.O.C.

AUTOIGNITION TEMPERATURE:
n/e

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION:

Health	Flammability	Reactivity	BASIS
1	1	0	Recommended by the National Fire Protection Association

HANDLING PRECAUTIONS:

Keep product away from heat, sparks, pilot lights, static electricity, and open flame.

FLAMMABLE OR EXPLOSIVE LIMITS (APPROXIMATE PERCENT BY VOLUME IN AIR):

Estimated values: Lower Flammable Limit n/e Upper Flammable Limit n/e

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:

Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Eighth Edition (1984):

Use water spray, dry chemical, foam or carbon dioxide. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for men attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

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FIRE AND EXPLOSION HAZARD INFORMATION

"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 OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

HEALTH AND HAZARD INFORMATION

VARIABILITY AMONG INDIVIDUALS:
Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

EFFECTS OF OVEREXPOSURE (Signs and symptoms of exposure):
High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other nervous system effects.

NATURE OF HAZARD AND TOXICITY INFORMATION:
Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

Product contacting the eyes may cause eye irritation.

Laboratory animal studies have shown that prolonged and repeated inhalation exposure to light hydrocarbon vapors in the same naphtha boiling range as this product can produce adverse kidney effects in male rats. However, these effects were not observed in similar studies with female rats and male and female mice and in limited studies with other animal species. Additionally, in a number of human studies, there was no clinical evidence of such effects at normal occupational levels. It is therefore highly unlikely that the kidney effect observed in male rats have significant implications for humans exposed at or below the recommended vapor limits in the workplace.

Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion may cause mild to severe pulmonary injury and possibly death.

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PHYSICAL DATA

The following data are approximate or typical values and should not be used for precise design purposes.

BOILING RANGE:

Wide range

VAPOR PRESSURE:

N/E

SPECIFIC GRAVITY (25°C/25°C):

(WATER = 1)

VAPOR DENSITY (AIR = 1):

N/E

< 1.0

MOLECULAR WEIGHT:

Wide range

PERCENT VOLATILE BY VOLUME:

49, Approximate

EVAPORATION RATE @ 1 ATM. AND 25°C

(77°F) (n-BUTYL ACETATE = 1):

SOLUBILITY IN WATER @ 1 ATM. and 25°C

(77°F):

n/e

Negligible

POUR, CONGEALING OR MELTING POINT:**FREEZING POINT:**

n/e

n/e

REACTIVITY

This product is stable and will NOT react violently with water. Hazardous polymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

Fumes, smoke, carbon monoxide, and other decomposition products, in the case of incomplete combustion.

CONDITIONS TO AVOID

Keep product away from ignition sources, such as heat, sparks, pilot lights, static electricity, and open flames.

TOXICITY

ORAL (Acute)

N/E

DERMAL (Acute)

N/E

EYE

N/E

INHALATION (Acute)

N/E

CHRONIC, SUBCHRONIC, ETC.

N/E

Medical Conditions Aggravated by Exposure: Unknown

This product does NOT contain any ingredients identified as carcinogenic by IARC, NTP, or OSHA.

All components known to be contained in this product are on the TSCA inventory or are exempt.

SARA Section 313 Status:

This material is not known to contain any chemicals on the SARA Section 313 list at a concentration greater than 1.0 percent or carcinogenic chemical on that list at a concentration greater than 0.1 percent.

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TOXICITY

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with local regulations. Continue to observe precautions for volatile, combustible vapors from absorbed material.

WASTE DISPOSAL METHOD: (Consult federal, state, or local authorities for proper disposal procedures.)
Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved waste site or facility.

PROTECTION AND PRECAUTIONS

VENTILATION:

Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapors in air. No smoking, flame or other ignition sources.

RESPIRATORY PROTECTION: (Use only NIOSH/MSHA approved equipment.)

Use supplied air respiratory protection in confined or enclosed spaces, if needed.

PROTECTIVE GLOVES:

Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION:

Use splash goggles or face shield when eye contact may occur.

OTHER PROTECTIVE EQUIPMENT:

Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

WORK PRACTICES/ENGINEERING CONTROLS:

Keep containers closed when not in use. Do not handle near heat, sparks, flame or strong oxidants. To prevent fire or explosion risk from static accumulation and discharge, effectively ground product transfer system in accordance with the National Fire Protection Association standard for petroleum products.

PERSONAL HYGIENE:

Minimize breathing vapor, mist, or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-

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PROTECTION AND PRECAUTIONS

soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

PREPARED BY: Erick Aho

CHEMIST

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