

14-JAN-09  
OSYRIS 6404 S

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To Whom It May Concern:

As you requested, attached is a copy of a Material Safety Data Sheet covering (our ref. no. 201355) OSYRIS 6404 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 6404 S

TOTAL Lubricants USA, Inc.  
5 N. Stiles Street  
Linden NJ 07036

REVISION DATE  
17-FEB-04

DATE ISSUED  
14-JAN-09

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**IDENTIFICATION AND EMERGENCY INFORMATION**

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PRODUCT NAME:  
OSYRIS 6404 S

PRODUCT #:  
201355

CHEMICAL NAME:  
N/A - Mixture

CAS #'S:  
Mixture

PRODUCT APPEARANCE AND ODOR:  
Amber liquid, solvent odor

CHEMICAL FAMILY:  
Petroleum solvent

SYNONYMS:  
Solvent-based rust preventive

EMERGENCY TELEPHONE:  
1-908-862-9300

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**COMPONENTS AND HAZARD INFORMATION**

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COMPONENTS: W/W HAZARD DATA (TLV, LD50, LC50, ETC.):

Synthetic isoparaffinic hydrocarbons TWA8 300 ppm  
CAS # 64742-48-9

Oxygenated Hydrocarbon based n/e  
Rust Preventive Additive  
CAS # n/a

Barium Compounds n/e  
CAS # n/a

For further information see the Toxicity section.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

Health	Flammability	Reactivity
1	1	0

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**TRANSPORTATION INFORMATION**

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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.

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**EMERGENCY FIRST AID**

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EYE CONTACT:

If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN CONTACT:

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**EMERGENCY FIRST AID**

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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.

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**FIRE AND EXPLOSION HAZARD INFORMATION**

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**FLASH POINT (MINIMUM):**

COMBUSTIBLE - Per DOT 49 CFR 173.115

120°F

ASTM D 56, Tag Closed Cup

**AUTOIGNITION TEMPERATURE:**

Approximately 349°C (660°F)

ASTM D 2155

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION:**

Health	Flammability	Reactivity
1	2	0

**HANDLING PRECAUTIONS:**

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

**FLAMMABLE OR EXPLOSIVE LIMITS (FOR SOLVENT COMPONENT, APPROXIMATE):**

Estimated values: Lower Flammable Limit 0.7% Upper Flammable Limit 7%

**GENERAL HAZARD:**

Combustible Liquid, can form combustible mixtures at temperatures at or above the flashpoint.

Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge.

**EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:**

Use water spray to cool fire exposed surfaces and to protect personnel.

Isolate "fuel" supply from fire.

Use foam, dry chemical, or water spray to extinguish fire. Avoid

spraying water directly into storage containers due to danger of

boilover. This liquid is volatile and gives off invisible vapors.

Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

**DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:**

None unusual, see REACTIVITY section.

**"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

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**FIRE AND EXPLOSION HAZARD INFORMATION**

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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.

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**HEALTH AND HAZARD INFORMATION**

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**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.

**POTENTIAL HEALTH EFFECTS**

EYE CONTACT: May cause slight eye irritation.

SKIN CONTACT: Occasional brief contact with the liquid will not result in significant irritation unless evaporation is impeded. May aggravate an existing dermatitis condition. Prolonged or repeated contact tends to remove skin oils possibly leading to irritation and dermatitis.

INHALATION: High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Low order of toxicity.

INGESTION: Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Minimal toxicity.

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**PHYSICAL DATA**

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

BOILING RANGE: (INITIAL)  
Approximately 169-193°C (335-380°F)

VAPOR PRESSURE:  
Less than 10 mm Hg @ 25°C  
ASTM D 2879

SPECIFIC GRAVITY (15.6°C/15.6°C):  
<1

VAPOR DENSITY (AIR = 1):  
Greater than 5

MOLECULAR WEIGHT:  
n/e

PERCENT VOLATILE BY VOLUME:  
Approximately 94 @ 1 ATM. AND 25°C  
(77°F)

pH:  
Essentially neutral

EVAPORATION RATE @ 1 ATM. AND 25°C  
(77°F):

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**PHYSICAL DATA**

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(N-BUTYL ACETATE = 1)  
0.1  
POUR, CONGEALING OR MELTING POINT: SOLUBILITY IN WATER @ 1 ATM. AND  
25°C (77°F):  
N/E Negligible; less than 0.1%

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**REACTIVITY**

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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.

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**TOXICITY**

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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.

SARA Section 313 Status: This product contains the following  
Section 313 reportable ingredients:

Component	CAS #	%
Barium compounds	n/a	4.8

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**SPILL OR LEAK PROCEDURES**

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**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

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**SPILL OR LEAK PROCEDURES**

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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.

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**PROTECTION AND PRECAUTIONS**

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**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-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.

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PREPARED BY: Erick Aho

CHEMIST

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