1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SANTOLUBE® MCS-2408 Lubricant Fluid
Chemical Family: Aliphatic polyester

FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE EXPOSURE, OR ACCIDENT
Call CHEMTREC – Day or Night – 1-800-424-9300.
For additional non-emergency information, call: 636-723-0240

2. COMPOSITION/INFORMATION ON INGREDIENTS

SANTOLUBE® MCS-2408 is 100% aliphatic polyester

3. HAZARDS IDENTIFICATION

SARA Hazard Notification
Hazard Categories under Criteria of SARA Title III Rules (40 CFR Part 30): None
Section 313 Toxic Chemical(s): Not Listed

4. FIRST AID MEASURES

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF MATERIAL FROM EYES, SKIN, AND CLOTHING.

5. FIRE FIGHTING MEASURES

Flash Point: 470°F(243°C) Method: Cleveland Open Cup
Extinguishing Media: In case of fire use water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

6. ACCIDENTAL RELEASE MEASURES

Emergency Spill and Leak Information: Contain fluid. Transfer liquid to containers for recovery or disposal. Absorb small leaks on clay or sawdust for disposal.

7. HANDLING AND STORAGE
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF MATERIAL FROM EYES, SKIN, AND CLOTHING.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

Storage: Product is stable under normal conditions of storage and handling.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye Protection**: SANTOLUBE® MCS-2408 does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

**Skin Protection**: Although SANTOLUBE® MCS-2408 does not present a significant skin concern; minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

**Respiratory Protection**: SANTOLUBE® MCS-2408 is not likely to present an airborne exposure concern under normal use. Use NIOSH/MSHA approved respiratory protection equipment if needed for mist and vapor exposure during unusual handling conditions. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH/MSHA or manufacturer. Respiratory protection programs must comply with 29 CFR § 1910.134.

**Airborne Exposure Limits**:

- **SANTOLUBE® MCS-2408**
  - OSHA PEL: None established
  - ACGIH TLV: None established

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**: Clear, moderately light yellow liquid

**Odor**: Mild inoffensive odor

**Vapor Pressure @ 20°C**: < 1mm Hg

**Vapor Density (air = 1)**: > 1

**Viscosity @ 210°F**: 8.5-9.5 cs
  - @100°F: 53.3 cs

**Specific Gravity @ 25°C/25°C**: 0.944-0.952

**Solubility in Water**: Negligible

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

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### 10. STABILITY AND REACTIVITY
Stability: SANTOLUBE® MCS-2408 is stable under ordinary handling and storage conditions.

Materials to avoid: Strong acids or alkalis; strong oxidizing agents.

Hazardous Decomposition Products: This product will generate carbon monoxide (CO), carbon dioxide (CO₂), lower molecular weight hydrocarbons, smoke, and soot when burned. Oxides of phosphorus may also be present.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

The following information presents both human experience and the results of scientific experiments used by qualified experts to assess the effects of SANTOLUBE® MCS-2408 on the health of exposed individuals and to support precautionary statements and Occupational Control Procedures recommended in this document. Proper evaluation of this health-related data may require the assistance of individuals trained in interpretation of this type of information.

Effects of Exposure

Dermal contact and inhalation are expected to be the primary routes of occupational exposure to SANTOLUBE® MCS-2408. Occupational exposure to this material has not been reported to cause significant adverse health effects. On the basis of available information, exposure to SANTOLUBE® MCS-2408 is not expected to produce significant adverse human health effects when recommended safety precautions are followed.

Toxicological Data

Data from studies with SANTOLUBE® MCS-2408 indicate the following:

Oral LD₅₀ (Rat): >5,000 mg/kg, Practically Nontoxic

Dermal LD₅₀ (Rabbit): >5,000 mg/kg, Practically Nontoxic

Eye Irritation (Rabbit, 24-hr): Slightly Irritating all animals were free of ocular irritation within 24 to 48 hours

Skin Irritation (Rabbit, 4-hr): Slightly Irritating 1.4 on a scale of 8.0

All animals were free of dermal irritation within 7 to 10 days.

Components

Data from the available literature on an aliphatic ester component of SANTOLUBE® MCS-2408 are discussed below:

Aliphatic Ester

The results of acute toxicity tests indicate that this material is practically nontoxic to rats and mice (LD₅₀ between 12,800 and 25,600mg/kg) by ingestion in single doses. No mortality and no signs of toxicity were observed in male rats exposed to 250 mg aliphatic ester/m³ of air for 4 hours. Administration of the aliphatic ester to four male rats at a dietary level of 3% for 3 weeks was reported to induce hepatic peroxisome proliferation increases in liver weight and activities of peroxisome – associate enzymes, and a decrease in serum lipids. No mutagenic effects are reported in microbial assays using four Salmonella strains, with and without mammalian microsomal activation.
12. ECOLOGICAL INFORMATION

SANTOLUBES LLC has not conducted environmental toxicity studies with this product.

13. DISPOSAL CONSIDERATIONS

This material when discarded is not a hazardous waste as defined by the Resource, Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with all federal, state and local environmental regulations. If there are any questions regarding the disposal of this material, please consult the Environmental, Health & Safety Department of SANTOLUBES LLC at 636-723-0240.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: Not Applicable
DOT Hazard Class/I.D. No.: This product is not classified as a hazardous material by the U.S. Department of Transportation.
DOT Label(s): Not Applicable
U.S. Surface Freight Class: Lubricating oil NOIBN
Reportable Quantity (RQ) Under U.S. EPA CERCLA Regulations: None Listed

15. REGULATORY INFORMATION

SARA Hazard Notification
Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 30) None

16. OTHER INFORMATION

Section 313 Toxic Chemical(s): Not Listed
This is for people trained in the National Paint & Coatings Association’s (NPCA) Hazardous Materials Identification System (HMIS) and the National Fire Protection Association (NFPA 704).

HMIS-NPCA

HMIS-NPCA

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NFPA 704

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HAZARD INDEX

| 0 = Minimal Hazard | 1 = Slight Hazard | 2 = Moderate Hazard | 3 = Serious Hazard | 4 = Severe Hazard |

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Date: 06/16/09 Supersedes 06/22/06