12-APR-11 VULSOL 13 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. 200261) VULSOL 13 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

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MATERIAL SAFETY DATA SHEET FOR VULSOL 13 S

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

REVISION DATE 22-FEB-10

DATE ISSUED 12-APR-11

IDENTIFICATION	AND	EMERGENCY	INFORMATION
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PRODUCT NAME:

PRODUCT #:

VULSOL 13 S

200261

CHEMICAL NAME:

CAS #'S:

Synthetic Cutting Fluid

Mixture

PRODUCT APPEARANCE AND ODOR:

CHEMICAL FAMILY:

Straw color liquid,

Synthetic Fluid

slight chemical odor

SYNONYMS: Synthetic coolant EMERGENCY TELEPHONE: CHEMTREC 1-800-424-9300

COMPONENTS AND HAZARD INFORMATION

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

Water

n/e

CAS # 7732-18-5

Esters of Polycarboxylic Acids CAS # 68551-94-0

n/e

n/e

Boramide

CAS # 68954-07-4

Carboxylic acid amine mixture CAS # n/a (mixture)

n/e

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

Health

Flammability Reactivity 0

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TRANSPORTATION INFORMATION

TRANSPORTATION/SHIPPING INFORMATION:

Department of Transportation (DOT): Not regulated

EMERGENCY FIRST AID

EYE CONTACT:

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

- profession

SKIN CONTACT:

In case of skin contact, remove contaminated clothing and wash skin

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EMERGENCY FIRST AID

thoroughly with soap and water.

INHALATION:

For effects produced by overexposure, remove to fresh air. If effects persist, obtain medical advice.

INGESTION:

If ingested, call a physician immediately. Possible aspiration hazard.

FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT (MINIMUM): N/A

AUTOIGNITION TEMPERATURE:

N/A

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION:

Health Flammability Reactivity

FLAMMABLE OR EXPLOSIVE LIMITS (approximate percent by volume in air):

Estimated values: N/A

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:

Foam, water spray (fog), dry chemical, carbon dioxide extinguishing agents may all be suitable for extinguishing fires involving this type 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. Wear self contained breathing apparatus and full turn out gear.

Cool fire exposed containers with water spray. Dried material can burn.

UNUSUAL FIRE AND EXPLOSION HAZARDS: n/a

"EMPTY" CONTAINER WARNING:

Empty containers retain residue (liquid or vapor) and can be dangerous. Do NOT pressurize, weld, cut 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 returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with government regulations.

HEALTH AND HAZARD INFORMATION

EXPOSURE LIMIT FOR TOTAL PRODUCT: N/E

VARIABILITY AMONG INDIVIDUALS:

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which 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):

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HEALTH AND HAZARD INFORMATION

Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis.

Product contacting the eye may cause irritation.

Possible aspiration hazard. Induced vomiting may cause aspiration of

product into the lungs.

(See Emergency First Aid Section).

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) > 1.0

VAPOR DENSITY (AIR = 1):

SOLUBILITY IN WATER @ 1 ATM. and 25°C

n/e

MOLECULAR WEIGHT:

Wide range

VOC % (ESTIMATED)

<21% (wt.)

EVAPORATION RATE @ 1 ATM. AND 25°C

(77°F) (n-BUTYL ACETATE = 1): > 1.0

(77°F): Soluble

POUR, CONGEALING OR MELTING POINT:

n/e

FREEZING POINT:

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.

Do not mix with nitrites due to the possible formation of nitrosamines.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

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

CONDITIONS TO AVOID:

Open flames.

TOXICITY

Medical Conditions Aggravated by Exposure: Unknown

This product does NOT contain any ingredients identified as carcinogenic by

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TOXICITY

IARC, NTP, or OSHA. 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.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Keep product out of sewers and watercourses by diking or impounding. Absorb
with sand or inert material. Sweep or scoop up and remove. Prevent spread
of spill. Advise authorities if product has entered or may enter sewers,
watercourses or extensive land areas. Assure conformity with local regulations.

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: (Always maintain below permissible exposure limits.) Use local exhaust to capture vapor, mist or fumes, if necessary.

RESPIRATORY PROTECTION: (Use only NIOSH approved equipment.)
Normally not needed at ambient temperatures.

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. DO NOT MIX WITH NITRITES OR PRODUCTS WHICH CONTAIN NITRITES.

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. 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

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PROTECTION AND PRECAUTIONS

washing thoroughly with soap and water.

PREPARED BY: Erick Aho

CHEMIST

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