MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer and

distributer

K-Line Industries, Inc.

315 Garden Avenue

Holland, MI 49424

Product use:

Lubricant for reaming and machining cast iron engine

components

Product description:

A mixture of SMF-500, water, ethanol and small amounts of

miscellaneous ingredients.

Emergency telephone number (616)-396-3564 (Monday-Friday 8:00 a.m. - 5:00 p.m., Central)

CHEMTREC:

800-424-9300 (24 hours)

Date prepared/issued:

3/23/01

2. COMPOSITION/INFORMATION ON INGREDIENTS

The criteria for listing components in the composition section include constituents that are present at 1.0% or greater, and are hazardous according to OSHA. This is not intended to be a complete compositional disclosure.

Chemical Name

CAS#

% by Weight

OSHA PEL

ACGIH TLV

Ethanol

64-17-5

1-2%

1000 ppm

1000 ppm

3. HAZARDS IDENTIFICATION

NFPA Hazard Classification

Fire hazard: 1 Health Hazard: 1 Reactivity Hazard: Not determined

Potential Health Effects of Individual Constituents:

<u>Ethanol</u>

Inhalation:

Inhalation of ethanol may cause respiratory tract irritation.

Ingestion:

Ethanol overexposure may cause vomiting and distorted perceptions.

Skin contact:

Ethanol may cause symptoms ranging from slight irritation to severe

dermatitis.

Eye contact:

Ethanol may cause eye irritation.

Other effects:

May cause headache, nervousness, dizzlness, tremors, fatigue nausea, unconsciousness, sleep disorders, hallucinations, loss of

muscular coordination and convulsions.

Target organs:

Eyes, skin, nervous system, liver and respiratory system

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4. FIRST AID MEASURES

Inhalation Move to fresh air. If irritation develops, seek medical aid.

Skin contact Wash off immediately with soap and plenty of water removing all

contaminated clothes and shoes. Seek medical aid if irritation

persists. Wash clothing before reuse.

Eye contact Rinse thoroughly with plenty of water, including under eye lids, for at

least 15 minutes and consult a physician.

Ingestion Not expected to be problem. However, if swallowed, DO NOT

induce vomiting. Give large quantities of water. Seek medical aid immediately. Never give anything by mouth to an unconscious

person.

5. FIRE-FIGHTING MEASURES

Extinguishing media Use foam, dry chemical powder (preferred) or carbon dioxide.

Specific hazards . None.

Firefighting Instructions Standard procedure for chemical fires Exercise caution when

fighting any chemical fire. A self-contained breathing apparatus and

protective clothing are essential.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions Do not flush into surface water or sanitary sewer system.

Methods for cleaning up Clean up promptly by using an absorbant, vacumm or otherwise

place in an approved container.

7. HANDLING AND STORAGE

Handling Provide suitable mechanical equipment for safe handling of drums

and other heavy packages.

Do not heat above Flash Point (>210 °F). Keep containers closed. Handle and open containers with care to prevent leakage or spillage.

Avoid contact with eyes, skin and clothing. Avoid breathing vapor if

generated. Use adequate ventilation. Wash thoroughly after

handling. Do not ingest.

Storage Keep at temperatures below 210 °F and away from ignition sources.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to

reduce exposure

Avoid contact with the skin and the eyes. Use local exhaust

ventilation where vapors may be generated.

Personal protective equipment

Respiratory protection

No special protective equipment required assuming that ethanol

vapor levels do not approach allowable levels.

Hand protection

Chemical resistant gloves.

Eye protection

Indirect vented goggles.

Skin and body protection

Long sleeved clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid with a soapy composition

Color

Milky white

Odor

Mild

Physical and

chemical properties

Flash point:> 210°F

Additional chemical and physical data is not available.

10. STABILITY AND REACTIVITY

Stability

Product has not been tested.

Materials to avoid

Product has not been tested. Ethanol, alone, is incompatible with acetyl chloride and oxidizing agents, and SMF-500, by itself, is

incompatible with strong acids.

Hazardous

decomposition products

Product has not been tested. However, it is not believed to be

affected by products causing hazardous decomposition. Ethanol,

alone, is affected by carbon oxides causing hazardous

decomposition.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product has not been tested.

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12. ECOLOGICAL INFORMATION

Ecotoxicity Product has not been tested.

13. DISPOSAL CONSIDERATIONS

Waste from residues/

unused products Ensure compliance with local, state and federal waste regulations.

Contaminated packaging Empty cont

Empty containers must comply with local, state and federal regulations prior to recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT Classifications

Not regulated.

15, REGULATORY INFORMATION

Regulatory Information Under SARA III Section 313, K-Line is required to inform you that the

following compound is in the product.

Chlorinated Ester CAS# 68440-29-9 3% of the SMF-500 portion of mixture.

16, OTHER INFORMATION

Disclaimer The information provided in this Material Safety Data Sheet is correct

to the best of our knowledge, information and belief at the date of its

publication.

Date prepared/issued: 3/23/01