

Last updated: November 2008

## 1. Product and Company Identification

Product Trade Name Formula K2

CAS Number Not applicable for mixtures

Generic Chemical Name Synthetic Oil Product Type 2T Engine Oil

Transportation Emergency CHEMTREC 1-800-424-9300 (Outside USA 703-527-3887)

**MSDS No.** 22901

MSDS Website www.maximausa.com

### 2. Composition/Information on Ingredients

Common Name	Chemical Name	CAS No.	Range (%)
Synthetic Ester Base Stock		Various	65-75
Solvent Naphtha Medium Aliphatic		64742-88-7	5-10
Polybutene		9003-29-6	5-15
Multi-functional additive mixture		Confidential	5-15

#### 3. Hazards Identification

#### **EMERGENCY OVERVIEW**

Under normal conditions of use, this product is not considered hazardous according to regulatory guidelines. Amber Liquid. DOT ERG No.: NA

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IMMEDIATE HEALTH EFFECTS

**Eye** Not expected to cause prolonged or significant eye irritation.

**Skin** Contact with the skin is not expected to cause prolonged or significant

irritation.

**Ingestion**Not expected to be harmful if swallowed.
Inhalation
Not expected to be harmful if inhaled.

### 4. First Aid Measures

**Eye** No specific first aid measures are required because this material is not expected to cause eye

irritation. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin** No specific first aid measures are required because this material is not expected to be

harmful if it contacts the skin. As a precaution, remove clothing and shoes if

contaminated. To remove the material from skin, use soap and water. Discard contaminated

clothing and shoes or thoroughly clean before reuse.

**Ingestion** No specific first aid measures are required because this material is not expected to be

harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an

unconscious person.

**Inhalation** No specific first aid measures are required because this material is not expected to be

harmful if inhaled. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.



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## 5. Fire Fighting Measures

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS Health: 1 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:

Flash Point ND (min. 200°C)

**Autoignition** NDA

Flammability (Explosive) Limits (% by volume in air) Lower: ND Upper: ND

**EXTINGUISHING MEDIA** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish

flames.

PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions** This material will burn although it is not easily ignited. For fires involving this

material, do not enter any enclosed or confined fire space without proper

protective equipment, including self-contained breathing apparatus.

**Combustion Products** Highly dependent on combustion conditions. A complex mixture of airborne

solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes

combustion.

#### 6. Accidental Release Measures

Protective Measures
Spill Management

**asures** Eliminate all sources of ignition in vicinity of spilled material.

Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean

up spill as soon as possible, observing precautions in Exposure

Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable

regulations.

**Report spills to local authorities and/or the U.S. Coast Guard's National** 

Response Center at (800) 424-8802 as appropriate or required.

## 7. Handling and Storage

**Handling** Avoid contaminating soil or releasing this material into sewage and drainage systems and

bodies of water. Wear recommended protective equipment. Practice good personal hygiene

after handling.

Storage Store in closed containers of proper construction. Store away from sources of ignition and in

areas of good ventilation. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Empty containers should be completely drained, properly closed, and

promptly returned to a drum reconditioner or disposed of properly.

Tel: 619.449.5000 M-TH 6am - 5pm PST



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### 8. Exposure Controls/Personal Protection

**Exposure Limits** No ACGIH TLV or OSHA PEL assigned. Minimize exposure.

**Ventilation** Use in areas of adequate ventilation. Use mechanical exhaust to control vapors or

mists.

**Gloves** Use nitrile or neoprene gloves.

**Eye Protection** Safety glasses, goggles or face shield are recommended.

**Respiratory** Use NIOSH/MSHA approved respirator with organic vapor cartridge and dust/mist

cartridge is recommended if exposure limit is exceeded. Self-contained breathing

apparatus is recommended for confined space entry.

Clothing Long sleeve shirt and apron when potential for skin contact. Wear neoprene or nitrile

rubber boots when necessary to avoid contaminating shoes.

#### 9. Physical and Chemical Properties

Appearance and Odor Liquid, Redish Orange color, Slight hydrocarbon odor

pH NA

Vapor Pressure <0.01 mmHg @ 100 °F

Vapor Density (Air = 1) >1 Boiling Point ND

**Solubility** Soluble in hydrocarbons; insoluble in water

Freezing Point NA Melting Point NA

**Specific Gravity** 0.85 - 0.87 @ 15.6 °C / 15.6 °C

**Volatile Organic** 

Compounds (VOC) <10.0% weight (Approximate) Viscosity (40 °C) 450 Saybolt Seconds (SUS)

#### 10. Stability and Reactivity Data

Chemical Stability This material is considered stable under normal ambient and anticipated storage and

handling conditions of temperature and pressure.

Incompatibility With Other Materials May react with strong oxidizing agents, such as chlorates, nitrates,

peroxides, etc.

Hazardous Decomposition Products None known (None expected)

**Hazardous Polymerization** Hazardous polymerization will not occur.



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## 11. Toxicological Information

**Eye Irritation** Not expected to cause eye irritation

**Skin Irritation** Not expected to be a primary skin irritant. Prolonged or repetitive contact may cause

irritation.

**Acute Oral Toxicity** Swallowing material may cause irritation of the gastrointestinal lining, nausea,

vomiting, diarrhea and abdominal pain.

Carcinogenic This material has not been identified as a carcinogen by NTP, IARC or OSHA.

**Genetic Toxicity** This product gave negative results in the following mutagenicity assays:

Microbial/Microsome Reverse Mutation Assay.

### ADDITIONAL TOXICOLOGY INFORMATION

This product contains petroleum and/or synthetic ester base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, severe hydrotreating or chemical reaction. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

#### 12. Ecological Information

This material is expected to have marginally adverse affects on marine and plant life. Spills may contaminate drinking water. This material is expected to be inherently biodegradable.

#### 13. Disposal Considerations

**Disposal** Oil collection services are available for used oil recycling or disposal. Place contaminated

materials in containers and dispose of in a manner consistent with applicable

regulations. Consult federal, state and local regulations regarding disposal methods. Do not

contaminate oil with solvents or other chemicals.

### 14. Transport Information

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Name**NOT REGULATED AS A HAZARDOUS MATERIAL FOR

TRANSPORTATION UNDER 49 CFR

DOT Hazard ClassNOT APPLICABLEDOT Identification NumberNOT APPLICABLEDOT Packing GroupNOT APPLICABLE



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## 15. Regulatory Information

**TSCA** All components of this material are listed on the TSCA inventory or are exempt.

#### **SARA 311/312**

1) Immediate (Acute) Health Effects NO

2) Delayed (Chronic) Health Effects YES

3) Fire Hazard NO

4) Sudden Release of Pressure Hazard NO

5) Reactivity Hazard NO

SARA 313 This product does not contain greater than 1.0% of any chemical substance on the SARA

Extremely Hazardous Substances list.

CAL PROP 65 Not listed

RCRA Not listed

CERCLA Listed

#### 16. Other Information

NFPA RATINGS Health: 1 Flammability: 1 Reactivity: 0 HMIS RATINGS Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.