

AMSOIL Material Safety Data Sheet

Date Issued/Revised: October 8, 2002
Supersedes: June 13, 2000

Section 1: Product and Company Identification

Manufacturer: AMSOIL, Inc. Telephone:
925 Tower Avenue CHEMTREC (Spill Emergency Only): 1-800-424-9300
Superior, WI 54880 Information: 715-392-7101

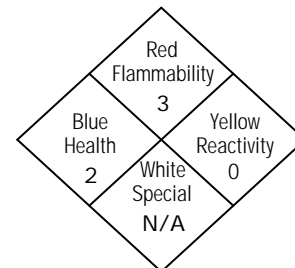
AMSOIL Product Code..... AEF
Product Label NameEngine Flush
Product UseEngine and Crankcase Cleaner

Section 2: Composition/Information on Ingredients

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

AROMATIC PETROLEUM DISTILLATE, CAS# 64742-94-5 appx weight=43%
ACGIH TLV & OSHA PEL: 5 mg/m³ (mist)
2-BUTOXYETHANOL, GLYCOL ETHER EB, CAS# 111-76-2 appx wt=10%
ACGIH TLV & OSHA PEL: 25 ppm (skin)
KEROSENE, CAS# 8008-20-6, appx wt=40%
ACGIH TLV & OSHA PEL: 500 ppm

NFPA & HMIS Rating



Section 3: Hazards Identification

WARNING!
Extremely Flammable Liquid, vapor may cause flash fire
POTENTIAL HEALTH EFFECTS: Eye, inhalation and skin irritant.

Section 4: First Aid Measures

EYE: Flush with water for 15-20 minutes. Seek immediate medical attention.

SKIN: Wash immediately with soap and water. Immediately remove contaminated clothing and launder before reuse. Discard shoes and leather articles saturated with the product. Obtain medical advice if irritation occurs.

INHALATION: Remove exposed person to fresh air. If breathing is labored give oxygen. If breathing has stopped apply artificial respiration. Get immediate medical attention.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. If vomiting does occur, keep head below hips to reduce risk of aspiration. Get immediate medical attention.

Section 5: Fire Fighting Measures

FLAMMABILITY PROPERTIES: Flash Point120°F(48°C)
MethodPMCC (ASTM D-93)
LFL/UFL.....10.6 / 11.0
Auto-ignition TemperatureNot Determined

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, and alcohol foam.

UNUSUAL FIRE & EXPLOSION HAZARDS: Closed containers may explode from internal pressure build-up when exposed to extreme heat and discharge contents. Vapor accumulation can flash or explode if ignited. Thermal decomposition of product may include toxic oxides of carbon. Overexposure may cause health hazards.

FIREFIGHTING EQUIPMENT: Full bunker gear recommended. Including a positive pressure self-contained breathing apparatus.

Section 6: Accidental Release Measures

Isolate spill area. Provide adequate ventilation. Wear appropriate personal protection. Recover free product for recycle and/or disposal. Add sand, earth or other suitable absorbent to spill area. Prevent entry into sewers and waterways. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulator Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spill.

Section 7: Handling and Storage

HANDLING: Avoid contact with eyes, skin or clothing. Wash hands after handling. Empty container may retain product residue, which may exhibit hazards of product.

STORAGE: Store and use in cool, dry, well-ventilated areas. Keep away from heat or flame.

Section 8: Exposure Controls/Personal Protection

VENTILATION: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

RESPIRATORY: Use a NIOSH approved respirator when necessary.

SKIN: Use Viton or Nitrile gloves to avoid prolonged or repeated skin contact.

EYE: Use splash goggles or face shield where splashing is expected or can occur.

EXPOSURE LIMITS: The Threshold Limit Value (TLV) of 5 mg/m³ is suggested for oil mist.

Section 9: Physical and Chemical Properties

Physical State	Liquid
Boiling Point	Not Determined
Freezing/Melting Point	Not Applicable
Vapor Pressure	Not Determined
Vapor Density (Air=1).....	Not Determined
Evaporation Rate.....	Not Determined
Solubility in Water	NIL
Specific Gravity (Water=1).....	0.8387
Density, lb./gal.....	6.985
Volatility (Volume)	80-90%
VOC	Unknown
pH	Essentially Neutral
Coefficient of Water/Oil Distribution.....	Not Determined
Odor	Mild, Bland ether odor
Odor Threshold	Not Determined
Appearance.....	Light straw, transparent
Viscosity, cSt @ 100°C	Not Applicable
Viscosity, cSt @ 40°C	Not Applicable
Viscosity Index	Not Applicable

Section 10: Stability and Reactivity

STABILITY: Stable. Avoid applications to hot surfaces.

INCOMPATIBILITY: Avoid contact with strong oxidants.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION OF PRODUCT: May produce fumes when heated to decomposition. Toxic oxides of carbon.

Section 11: Toxicological Information**ACUTE EXPOSURE**

- Eye Irritation: Moderate to strong eye irritation. Based on data from components or similar material.
- Skin Irritation: Not expected to be a primary skin irritant. Based on data from components or similar material. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting, and cracking of the skin.
- Respiratory Irritation: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.

CHRONIC EXPOSURE

- Chronic Toxicity: Some components may aggravate liver and kidney disease, anemia, coronary disease or rhythm disorders of the heart. Only in quantities exceeding the TLV..
- Carcinogenicity: No data available to indicate product present at greater than 0.1% are a carcinogenic hazard.
- Mutagenicity: No data available to indicate product present at greater than 1.0% present a mutagenic or genotoxic hazard.
- Reproductive Toxicity: No data available to indicate product present at greater than 1.0% present a reproductive hazard.
- Teratogenicity: No data available to indicate product present at greater than 1.0% present a teratogenic hazards.

ADDITIONAL INFORMATION

- Exposure Limits: Under conditions, which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.

There are extensive toxicological data available on the various components of this product. An adequate representation of all these data is beyond the scope of this document. Please contact the AMSOIL Material Safety Data Sheet Coordinator for more details.

Section 12: Ecological Information

No data available on the adverse effects of this product on the environment.

Section 13: Disposal Considerations

Material is expected to be hazardous when disposed. Dispose of in accordance with all local, state and federal regulations.

Section 14: Transport Information

This product is classified as Combustible liquids N.O.S., NA1993 for DOT shipping. Hazard Label ORM-D. For further information relative to spills resulting from transportation incidents, refer to the latest DOT Emergency Response Guidebook for Hazardous Materials.

Section 15: Regulatory Information

U.S. Federal Regulations

- OSHA Table Z.....Not Applicable
- TSCA..... Listed
- CERCLA 40 CFR 302.4Not Applicable
- SARA Title III
- Section 302 Extremely HazardousNot Applicable
- Section 311/312
- Fire Hazard Yes
- Reactive HazardNo
- Release of Pressure.....No
- Acute Health Hazard..... Yes
- Chronic Health HazardNo
- Section 313 Toxic Chemical2-Butoxyethanol, Glycol Ether EB,
..... CAS# 111-76-2 @ 10%

U.S. State Regulations

- California (Prop 65)
- Does not contain chemicals known to the state of California to cause cancer.

International Regulations

- WHMIS All components listed

Section 16: Other Information

The information and recommendations contained herein are, to the best of AMSOIL's knowledge and belief, accurate and reliable as of the date issued. AMSOIL makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and AMSOIL shall not be liable for any loss or damage based upon the criteria supplied by the developers of these rating systems, together with AMSOIL's interpretation of the available data.