

Material Safety Data Sheet

Envirotemp[®] 200 Fluid

Cooper Power Systems
1900 East North Street
Waukesha, Wisconsin 53188-3899 USA

Emergency Telephone: (262) 547-1251
Product Information: www.cooperpower.com

Hazardous Ingredients/Identity Information

Exposure Limits:

CAS #	Component	OSHA PEL	ACGIH TLV
118685-29-3	pentaerythritol ester of heptanoic and isononanoic acids	none listed	none listed
128-37-0	hindered phenol	none listed	none listed

Cooper Power Systems recommends a TLV of 5 mg/m³ as a precautionary measure.

Hazardous Materials Identification System (HMIS): Health 1 Flammability* 1 Reactivity* 0

Components of this product are listed on the U.S. Toxic Substances Control Act Chemical Substances Inventory.

* Interchangeable with NFPA 704 ratings.

Physical/Chemical Characteristics

Boiling Point: >310 °C

Specific Gravity (H₂O = 1): 0.97

Vapor Pressure (mm Hg): <0.01 @ 20 °C

Pour Point: -55 °C

Vapor Density (air = 1): n/a

Evaporation Rate (butyl acetate = 1): nil

Solubility in water: negligible; <0.1%

Volatile Organic Compounds (g/L): <0.001

Appearance and odor: amber, oily liquid; low odor

Fire and Explosion Hazard Data

Flash Point (ASTM D-92): 270 °C (typical)

Lower Flammability Limit: unknown

Upper Flammability Limit: unknown

Extinguishing Media: CO₂, dry chemical, foam

Special Fire Fighting Procedures: Use MSHA/NIOSH approved self-contained breathing apparatus with full face mask and full protective equipment in confined areas. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from source of ignition. Application of water to flaming oil can cause spreading.

Unusual Fire and Explosion Hazards: Slight when exposed to flame; can react with oxidizing materials.

Reactivity Data

Stability: Envirotemp 200 fluid is stable under normal conditions of use.

Incompatibility (Materials to avoid): Avoid contact with strong acids or strong bases.

Hazardous Decomposition or By-Products: carbon monoxide, carbon dioxide

Hazardous Polymerization: will not occur

Health Hazard Data

Routes of Entry: Skin contact; eye contact or inhalation are possible under mist conditions.

Skin: Essentially non-toxic. Estimated rabbit acute dermal LD₅₀ >5000 mg/kg. Repeated or prolonged contact may result in localized irritation of the skin. May cause reactions in some individuals.

Ingestion: Essentially non-toxic. Synthetic polyol esters with aliphatic side chains similar to Envirotemp 200 fluid have demonstrated a rat acute oral LD₅₀ >5000 mg/kg. May cause gastrointestinal distress. Symptoms may include irritation, nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation. Exposure to dense oil mist may lead to respiratory problems.

Carcinogenicity: none
no

NTP: no

IARC Monographs: no

OSHA Regulated:

Signs and Symptoms of Exposure: none known

Medical Conditions Generally Aggravated by Exposure: none known

Emergency and First Aid Procedures: If ingested, DO NOT induce vomiting. Drink plenty of water. Get immediate medical attention. If inhaled, remove affected person from exposure to mists. For eye contact, flush the eyes immediately with large amounts of water with the eyelids held away from the eye to ensure thorough rinsing. For skin contact, remove by washing with soap and water. Get medical attention if irritation persists.

Control Measures

Respiratory Protection: Use MSHA/NIOSH approved supplied-air respiratory protection if occupational exposure limits are exceeded.

Ventilation: General mechanical ventilation can be used to control or reduce airborne concentrations of oil.

Protective Gloves: Use chemical-resistant (neoprene) gloves to prevent prolonged or repeated skin contact.

Eye Protection: Wear safety glasses or goggles to prevent eye contact. Eye baths should be readily available in the area of handling Envirotemp 200 fluid.

Other Protective Clothing or Equipment: Wear chemical-resistant (neoprene) apron or other impervious clothing to avoid prolonged or repeated skin contact.

Work/Hygenic Practices: Wash with soap and water after contact. Avoid exposure to mists.

Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Stop flow or eliminate source of leakage. Eliminate all sources of ignition. Combine and recover any free liquid. Absorb with an oil absorbent material. No special hazards except under mist or spray conditions. A spill or release to navigable waters must be reported immediately to the National Response Center (800-424-8802). Spills may be reportable to state or local agencies.

Waste Disposal: Recycling -- consult with local used oil recyclers. Envirotemp 200 fluid when recycled, discarded or disposed of is used oil per 40 CFR 279. Envirotemp 200 fluid is not a hazardous waste per 40 CFR 261. Envirotemp 200 fluid from retrofilled electrical equipment, by virtue of contamination from residues of earlier fluid(s), may qualify as a hazardous waste per 40 CFR 261.

Precautions to be Taken in Handling and Storage: Avoid extremes of temperature in storage. Store Envirotemp 200 fluid in labeled, tightly closed containers in cool, dry, isolated and well-ventilated areas, away from sources of ignition or heat. To maintain fluid for intended use as an electrical insulating fluid, eliminate exposure to oxygen and moisture.

This Material Safety Data Sheet has been prepared in order to help the users of Envirotemp 200 fluid. The data contained herein is accurate as of the date of preparation of this sheet.

Effective Date: January 13, 2005



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