
MSDS-ENVIRO-SOLV(REV. 06)

MATERIAL SAFETY DATA SHEET

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CHEMTREC 24-HOUR EMERGENCY RESPONSE

TOLL FREE NUMBER: (800) 424-9300

INTERNATIONAL CALLS: COLLECT (703) 527-3887

CHEMTREC should only be contacted in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. PRODUCT

NAME

ENVIRO-SOLV

(BLEND USING n-PROPYL BROMIDE)

2.

COMPOSITION AND INFORMATION ON INGREDIENTS

CAS Number

Weight % OSHA PEL ACGIH TLV

n-Propyl bromide

106-94-5

10 -30

25 ppm**

Not est.

Methyl Nonafluorobutyl ether

163702-07-6

30 - 40 750 ppm**

Not est.

Methyl Nonafluoroisobutyl ether 163702-08-7

30 - 40

750 ppm**

Not est.

1,2 Epoxybutane

106-88-7

< 1

Not est.

Not est.

2-Methyl-2-propanol

75-65-0

< 2

100 ppm

100 ppm

Dimethoxymethane 109-87-5

< 2

1000 ppm

1000 ppm

2-Propanol

67-63-0

3 - 8

400 ppm

400 ppm

**

Source of Exposure Limit Data: Manufacturer's TWA

3. HAZARDS

IDENTIFICATION

SYMPTOMS/EFFECTS OF OVEREXPOSURE

Inhalation: May irritate the nose, throat, and lungs. Exposure to high doses may cause central nervous system depression (anesthetic-like effects). Doses which cause anesthetic-like effects may also cause adverse effects in liver, lung, and kidney.

Ingestion:

Low order of toxicity. May cause mild nausea and abdominal discomfort

Skin:

Prolonged exposure will cause a skin irritation.

Eyes:

Contact with eyes may cause mild irritation.

Listed Carcinogens: None

4.

FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

Ingestion:

Do not induce vomiting. Seek medical attention.

Skin:

Remove contaminated clothing. Thoroughly wash affected area with soap water; use skin cream if irritation is severe.

Eyes:

Immediately flush eyes with water for 15 minutes. Call a physician if

irritation persists.

5.

FIRE FIGHTING MEASURES

Extinguishing Media: Dry chemical, chemical foam, carbon dioxide. Class BC, ABC fire extinguisher.

Special Fire Fighting Procedures: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

5.

FIRE FIGHTING MEASURES CONTINUED

Unusual Fire and Explosions Hazard: Vapors can travel considerable distances to source of ignition. Exposure to extreme heat can give rise to thermal decomposition.

6.

ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in chemical waste container. Clean up residue with an appropriate organic solvent. For large spills, dike for later disposal. Observe government regulations.

7. HANDLING

AND

STORAGE

Store in original container, preferably in a cool ventilated, fire-resistant building. Avoid overheating or freezing. Avoid open flames and sparks. Since empty containers may retain product residues (vapor, liquid, or solid) all label precautions must be observed.

8.

EXPOSURE CONTROLS - PERSONAL PROTECTION

Respiratory:

Use NIOSH/MSHA approved respirator if ventilation is not sufficient and if mists are generated.

Ventilation:

If desirable to reduce odor, local exhaust can also be effective in minimizing odor. Provide sufficient ventilation to maintain emissions below recommended exposure limits.

Clothing/Glove:

Chemically resistant gloves should be used with all industrial chemicals.

Eye Protection:

Safety glasses/goggles are recommended. Provide eye bath near work site.

9.

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (760 mm Hg): 130°F

(54°C)

Vapor Density (Air = 1): >1

% Volatile (By weight):

100

Evaporation Rate (BUAC = 1): < 1

Specific Gravity (H₂O = 1):

1.43 @ 77°F

(25°C)

Solubility in Water: Negligible

Vapor Pressure (20°C):

150 mm Hg

Appearance and Odor: Clear colorless

liquid with a slight ethereal odor.

Flash Point:

None (ASTM D93-85, Pensky-

Martens Closed Cup)

Flammable Limits

(% By Volume in Air): Not determined

10. STABILITY AND REACTIVITY

Stability: LENIUM CP is stable

Conditions to Avoid: Storage temperatures above 130°F.

Incompatibility: Strong mineral acids and strong oxidizing agents. Prolonged contact with aluminum, magnesium, and zinc metals should be avoided.

Hazardous Decomposition Products: Thermal decomposition products are known to be hazardous.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Methyl Nonafluorobutyl ether and Methyl Nonafluoroisobutyl ether

LD50/oral/rat = >5,000 mg/kg

Acute inhalation lethal concentration = > 100,000 ppm (rat, 4 hour).

11. TOXICOLOGICAL

INFORMATION CONTINUED

Mutagenicity: Not a mutagen in reverse mutation or chromosomal aberration assays.

Cardiac sensitization: No signs of sensitization at exposures up to 100,000 ppm.

Dermal sensitization: Not a skin sensitizer.

2-Propanol

LD50/oral/rat = 5,500 mg/kg

LD50/dermal/rabbit = 12,900 mg/kg

LC50/rat = 19,000 ppm (female); 22,500 ppm (male)

LD50/oral/rat = 4,260 mg/kg

LC50/rat = 253,000 mg/m

3

/0.5 hour

1,2

epoxybutane

LD50/oral/rat = 500 mg/kg

LD50/dermal/ rabbit = 2,100 ul/kg

2-Methyl-2-propanol

LD50/oral/rat = 3,500 mg/kg

Dimethoxymethane

LC50/rat = 15,000 ppm

12. ECOLOGICAL

INFORMATION

No information available.

13. DISPOSAL

CONSIDERATIONS

Waste treat or incinerate used material in compliance with all applicable government regulations.

14. TRANSPORT

INFORMATION

Non-regulated.

15. REGULATORY

INFORMATION

The product contains 1,2 epoxybutane and 2-methyl-2-propanol which are subject to the reporting requirements of SARA Title III, Section 313. No other components of

LENIUM CP appears on any of the EPA's lists of toxic or hazardous substances.

None of the components of this product is listed in California's Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 as a chemical known to cause cancer, birth defects or other reproductive harm.

All the components of this product are listed on the TSCA inventory.

16. OTHER

INFORMATION

NFPA Codes: Health: 1

Fire: 0

Reactivity: 0

We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this

information and of these opinions and the conditions of use of the product are not within the control of AMERICAN NIAGARA, it is the user's

obligation to determine the conditions of safe use of the product.