1. Product and Company Identification

Material name: Dynasolve 185
Version #: 01
Revision date: 12-23-2008
CAS #: Mixture
Product code: J008
Product use: Polymer remover
Manufacturer information: Dynaloy, LLC
6445 Olivia Lane
Indianapolis, IN 46226 USA
(317) 788-5694
1-800-424-9300 (CHEMTREC)
FOR INTERNATIONAL CALLS
703-527-3887

2. Hazards Identification

Potential health effects

Eyes: This product may be severely irritating to the eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Skin: Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

Inhalation: This product may cause irritation to the respiratory system. Excessive inhalation of this product may cause headache, dizziness, blurred vision, nausea and vomiting.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-PYRROLIDINONE, 1-METHYL-</td>
<td>872-50-4</td>
<td>80 - 90</td>
</tr>
<tr>
<td>ETHANOL, 2-(2-PHENOXYETHOXY)-</td>
<td>104-68-7</td>
<td>5 - 15</td>
</tr>
<tr>
<td>POLY(OXY-1,2-ETHANEDIYL), ALPHA. -(4-NONYLPHENYL)-.OMEGA. -HY</td>
<td>127087-87-0</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

4. First Aid Measures

First aid procedures

Eye contact: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

Skin contact: Immediately take off all contaminated clothing. For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media: Alcohol foam. Carbon dioxide, dry chemical or water.

Protection of firefighters

Protective equipment and precautions for firefighters: Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Hazardous combustion products: Decomposition of this product may emit oxides of nitrogen and carbon monoxide.
6. Accidental Release Measures

Methods for containment
Eliminate sources of ignition. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up
Absorb spill with inert material. Shovel material into appropriate container for disposal.

7. Handling and Storage

Handling
Avoid prolonged or repeated skin contact with this material.

Storage
Keep the container tightly closed and in a cool, well-ventilated place. Do not store, incinerate, or heat this material above 120 degrees Fahrenheit (48°C). Do not freeze.

8. Exposure Controls / Personal Protection

Engineering controls
Explosion proof exhaust ventilation should be used if product is heated near or above its flash point.

Personal protective equipment
Eye / face protection
Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection
Use impervious gloves. Normal work clothing (long sleeved shirts and long pants) is recommended. Use of impervious apron and boots are recommended where splashing of the chemical is likely.

Respiratory protection
If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

9. Physical & Chemical Properties

Physical state
Liquid.

pH
Not available.

Freezing point
Not available.

Boiling point
>= 696.2 °F (>= 369 °C)

Flash point
199.4 °F (93 °C) lowest flashing component

Evaporation rate
0.06 BuAc

Flammability (Train fire)
Not available.

Flammability limits in air, lower, % by volume
Not available.

Flammability limits in air, upper, % by volume
Not available.

Vapor pressure
0.29 hPa

Vapor density
3.4

Relative density
Not available.

Solubility (H2O)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Specific gravity
1.04

Density
1.04 g/cm³

10. Chemical Stability & Reactivity Information

Chemical stability
Stable under normal conditions.

Incompatible materials
Strong oxidizing agents (peroxides, chlorine, strong acids).

Hazardous decomposition products
Hazardous combustion products may include carbon monoxide, carbon dioxide and hydrocarbon fragments.

Possibility of hazardous reactions
Will not occur.
11. Toxicological Information

**Toxicological data**

**Product** | **Test Results**
---|---
Dynasolve 185 (Mixture) | Acute Dermal LD50 Rabbit: 8889 mg/kg estimated
Acute Oral LD50 Mouse: 6874 mg/kg estimated
Acute Oral LD50 Rat: 4336 mg/kg estimated
Acute Other LD50 Mouse: 1130 mg/kg estimated
Acute Other LD50 Rat: 1304 mg/kg estimated

**Components**

**Product** | **Test Results**
---|---
2-PYRROLIDINONE, 1-METHYL- (872-50-4) | Acute Dermal LD50 Rabbit: 8000 mg/kg
Acute Oral LD50 Mouse: 5130 mg/kg
Acute Oral LD50 Rat: 3914 mg/kg
Acute Other LD50 Mouse: 54.5 mg/kg
Acute Other LD50 Rat: 80.5 mg/kg

12. Ecological Information

**Ecotoxicological data**

**Product** | **Test Results**
---|---
Dynasolve 185 (Mixture) | LC50 Fish: 3828 mg/l 96 Hours estimated

Ecotoxicity | No data available for this product.
Persistence and degradability | Not available.

13. Disposal Considerations

**Disposal instructions** Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

14. Transport Information

**DOT**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

15. Regulatory Information

**US federal regulations** All components are on the U.S. EPA TSCA Inventory List.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration**
2-PYRROLIDINONE, 1-METHYL- (872-50-4) 1.0 %

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**
2-PYRROLIDINONE, 1-METHYL- (872-50-4) Listed.

**CERCLA (Superfund) reportable quantity**
None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**
- Immediate Hazard - Yes
- Delayed Hazard - No
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

**Section 302 extremely hazardous substance**
No

**Section 311 hazardous chemical**
Yes
State regulations

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
2-PYRROLIDINONE, 1-METHYL- (872-50-4) Listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

US - New Jersey Community RTK (EHS Survey): Reportable threshold
2-PYRROLIDINONE, 1-METHYL- (872-50-4) 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance
2-PYRROLIDINONE, 1-METHYL- (872-50-4) Listed.

16. Other Information

HMIS® ratings
Health: 2
Flammability: 2
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 2
Instability: 0

Disclaimer
NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.