1. Product and Company Identification

Material name: Dynasolve 165
Version #: 04
Revision date: 01-19-2011
CAS #: Mixture
Product code: J006
Product use: Polymer Stripper
Manufacturer information: Dynaloy, LLC
6445 Olivia Lane
Indianapolis, IN 46226 USA
(317) 788-5694
1-800-424-9300 (CHEMTREC)
703-527-3887 ccn 7178
For International Calls

2. Hazards Identification

Potential health effects:
- Eyes: This product is severely irritating to the eyes and may cause eye burns. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
- Skin: This product is severely irritating to the skin and may cause burns.
- Inhalation: Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Repeated inhalation may be harmful; lung irritation and serious central nervous system disorders may result.
- Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYLENE CHLORIDE</td>
<td>75-09-2</td>
<td>80 - 90</td>
</tr>
<tr>
<td>FORMIC ACID 90%</td>
<td>64-18-6</td>
<td>10 - 20</td>
</tr>
<tr>
<td>ACETIC ACID, GLACIAL</td>
<td>64-19-7</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>BENZENE SULFONIC ACID, DODECYL-</td>
<td>27176-87-0</td>
<td>1 - 2.5</td>
</tr>
</tbody>
</table>

4. First Aid Measures

First aid procedures:
- Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or advice.
- Skin contact: For skin contact flush with large amounts of water while removing contaminated clothing. 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. Do not induce vomiting unless directed to do so by medical personnel.

Notes to physician: This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

5. Fire Fighting Measures

Extinguishing media:
- Suitable extinguishing media: Dry chemical, foam, carbon dioxide, water fog.
Protection of firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Hazardous combustion products

Irritating and toxic gases or fumes may be released during a fire.

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. Wash thoroughly after handling.

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).

8. Exposure Controls / Personal Protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETIC ACID, GLACIAL (64-19-7)</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
<tr>
<td>FORMIC ACID 90% (64-18-6)</td>
<td>STEL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td>METHYLENE CHLORIDE (75-09-2)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - OSHA Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETIC ACID, GLACIAL (64-19-7)</td>
<td>PEL</td>
<td>25 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>FORMIC ACID 90% (64-18-6)</td>
<td>PEL</td>
<td>9 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 mg/m3</td>
</tr>
<tr>
<td>METHYLENE CHLORIDE (75-09-2)</td>
<td>STEL</td>
<td>125 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

Engineering controls
Explosion proof exhaust ventilation should be used.

Personal protective equipment

Eye / face protection
Wear chemical goggles.

Skin protection
Use impervious gloves. Use of impervious apron and boots are recommended.

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
N/AP

Boiling point
123.2 °F (50.69 °C) estimated

Flash point
N/AP

Evaporation rate
0.7 BuAc

Vapor pressure
355 hPa

Solubility (H2O)
Not available.

Specific gravity
1.2901 estimated
Density: 1.29 g/cm³

10. Chemical Stability & Reactivity Information

Chemical stability: Stable under normal conditions.

Incompatible materials: Strong acids, alkalies and oxidizing agents.

Hazardous decomposition products: Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.

Possibility of hazardous reactions: Will not occur.

11. Toxicological Information

Toxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasolve 165 (Mixture)</td>
<td>Acute Inhalation LC50 Guinea pig: 6556 mg/l estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Mouse: 4159 mg/l estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Rat: 832 mg/l estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LD50 Mouse: 18735 mg/l estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Mouse: 10549 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 2212 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Acute Other LD50 Mouse: 1392 mg/kg estimated</td>
</tr>
</tbody>
</table>

Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZENE SULFONIC ACID, DODECYL- (27176-87-0)</td>
<td>Acute Oral LD50 Rat: 890 mg/kg</td>
</tr>
<tr>
<td>FORMIC ACID 90% (64-18-6)</td>
<td>Acute Oral LD50 Mouse: 1076 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 1830 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Other LD50 Mouse: 142 mg/kg</td>
</tr>
<tr>
<td>ACETIC ACID, GLACIAL (64-19-7)</td>
<td>Acute Inhalation LC50 Guinea pig: 5000 mg/l 1 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Mouse: 5000 mg/l 1 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 3530 mg/kg</td>
</tr>
<tr>
<td>METHYLENE CHLORIDE (75-09-2)</td>
<td>Acute Inhalation LC50 Guinea pig: 40.2 mg/l 6 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Mouse: 49.1 mg/l 6 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Rat: 52 mg/l 6 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LD50 Mouse: 16000 mg/l 7 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 1600 mg/kg</td>
</tr>
</tbody>
</table>

Carcinogenicity

IARC Monographs: Overall evaluation
- METHYLENE CHLORIDE (75-09-2): 2B Possibly carcinogenic to humans.

US ACGIH Threshold Limit Values: A3 carcinogen
- METHYLENE CHLORIDE (75-09-2): A3 Confirmed animal carcinogen with unknown relevance to humans.

US NTP Report on Carcinogens: Anticipated carcinogen
- METHYLENE CHLORIDE (75-09-2): Anticipated carcinogen.

US OSHA Specifically Regulated Substances: Potential cancer hazard
- METHYLENE CHLORIDE (75-09-2): Potential cancer hazard.

12. Ecological Information

Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynasolve 165 (Mixture)</td>
<td>EC50 Daphnia: 737 mg/l 48 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>LC50 Fish: 350 mg/l 96 Hours estimated</td>
</tr>
</tbody>
</table>

Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMIC ACID 90% (64-18-6)</td>
<td>EC50 Water flea (Daphnia magna): 138 - 165.6 mg/l 48 Hours</td>
</tr>
<tr>
<td>ACETIC ACID, GLACIAL (64-19-7)</td>
<td>EC50 Water flea (Daphnia magna): 65 mg/l 48 Hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Bluegill (Lepomis macrochirus): 75 mg/l 96 Hours</td>
</tr>
</tbody>
</table>
Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYLENE CHLORIDE (75-09-2)</td>
<td>EC50 Water flea (Daphnia magna): 1250 mg/l 48 Hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Fathead minnow (Pimephales promelas): 140.8 - 277.8 mg/l 96 Hours</td>
</tr>
</tbody>
</table>

Ecotoxicity

No data available for this product.

13. Disposal Considerations

Disposal instructions

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

14. Transport Information

**DOT**

Basic shipping requirements:

- **UN number**: UN2922
- **Proper shipping name**: Corrosive liquids, toxic, n.o.s. (FORMIC ACID 90% RQ=49020 LBS, METHYLENE CHLORIDE RQ=1171 LBS)
- **Hazard class**: 8
- **Subsidiary hazard class**: 6.1
- **Packing group**: II

Additional information:

- **Special provisions**: IB3, T7, TP1, TP28
- **Packaging exceptions**: 154
- **Packaging non bulk**: 203
- **Packaging bulk**: 241
- **ERG number**: 154

**IATA**

Basic shipping requirements:

- **Proper shipping name**: Corrosive liquid, toxic, n.o.s. (FORMIC ACID 90%, METHYLENE CHLORIDE)
- **Hazard class**: 8
- **Subsidiary hazard class**: 6.1
- **UN number**: 2922
- **Packing group**: II

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**

- FORMIC ACID 90% (64-18-6) 1.0%
- METHYLENE CHLORIDE (75-09-2) 0.1%

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

- FORMIC ACID 90% (64-18-6) Listed.
- METHYLENE CHLORIDE (75-09-2) Listed.
CERCLA (Superfund) reportable quantity
METHYLENE CHLORIDE: 1000
FORMIC ACID 90%: 5000
ACETIC ACID, GLACIAL: 5000
BENZENE SULFONIC ACID, DODECYL-: 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
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
METHYLENE CHLORIDE (75-09-2) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
METHYLENE CHLORIDE (75-09-2) Listed: April 1, 1988 Carcinogenic.

US - New Jersey Community RTK (EHS Survey): Reportable threshold
FORMIC ACID 90% (64-18-6) 500 LBS
METHYLENE CHLORIDE (75-09-2) 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance
ACETIC ACID, GLACIAL (64-19-7) Listed.
BENZENE SULFONIC ACID, DODECYL- (27176-87-0) Listed.
FORMIC ACID 90% (64-18-6) Listed.
METHYLENE CHLORIDE (75-09-2) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard
METHYLENE CHLORIDE (75-09-2) Special hazard.

16. Other Information
HMIS® ratings
Health: 3*
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 0
Instability: 0

Disclaimer
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