Material Safety Data Sheet

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY

As Used on Label and List

RESIST REMOVER RR41

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name
Futurrex, Inc.

Emergency Telephone Number
1-800-535-5053 (U.S. and Canada)

International Emergency Phone Number
+1-352-323-3500

Address (Number, Street, City, State and ZIP Code)
24 Munsonhurst Road
Franklin, New Jersey 07416

Telephone Number for Information
1-888-999-4188

Date Prepared
10/28/2011

Email:
info@futurrex.com

Signature of Prepare (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))

Dimethyl Sulfoxide

OSHA PEL
None

ACGIH TLY
None

CAS Number % (optional)
67-68-5

Proprietary Ingredient

*All Components of the product are registered in the Chemical Substance Inventory according to the Toxic Substance Control Act.

Section III - Physical/Chemical Characteristics

Boiling Point

(°C) 189

Specific Gravity (H2O=1)

>1

Vapor Pressure (mm Hg)

(20°C) 0.46

Melting Point

(°C) 18.3

Vapor Density (AIR-1)

2.7

Evaporation Rate

(Butyl Acetate=1) <1

Solubility in Water

Unlimited

Appearance and Odor

Clear liquid. Slight odor.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)

89 C, Tag Closed Cup

Flammable Limits. % volume in air

LEL 3.0-3.5

UEL 42-63

Extinguishing Media.

Foam, carbon dioxide, dry powder, water spray.

Special Fire Fighting Procedures.

Wear a self contained breathing apparatus.

Unusual Fire and Explosion Hazard.

Burning dimethyl sulfoxide produces poisonous gases (sulfur oxides).
### Section V - Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable</td>
<td>Prolonged heating above 150°C</td>
</tr>
<tr>
<td>Stable</td>
<td>X</td>
</tr>
</tbody>
</table>

**Incompatibility (Materials to Avoid)**
- Organic and inorganic acid chlorides, strong oxidizing agents, alkali metals.

**Hazardous Decomposition or Byproducts**
- Sulfur dioxide, formaldehyde, methyl mercaptan, dimethyl sulfide.

**Hazardous Polymerization**
- May Occur

**Conditions to Avoid**
- N.A.

**Will Not Occur**
- X

### Section VI - Health Hazard Data

<table>
<thead>
<tr>
<th>Route(s) of Entry</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Health Hazards (Acute and Chronic)**
- Inhalation: High vapor concentration may cause headache, dizziness.
- Skin: DMSO may penetrate the skin under certain conditions.
- Ingestion: <4.5 G/KG (rat)

**Carcinogenicity:**
- NTP: No
- IARC Monographs: No
- OSHA Regulated: No

**Signs and Symptoms of exposure**
- Inhalation: may cause dizziness.
- Eyes and skin: may cause irritation.

**Medical Conditions Generally Aggravated by Exposure**
- Not investigated.

**Emergency and First Aid Procedures**
- Inhalation: remove victim to fresh air.
- Skin contact: wash with soap and water.
- Ingestion: Do not induce vomiting. Get medical attention.

### Section VII - Precautions for Safe Handling and Use

**Steps to Be Taken in Case Material is Released or Spilled**
- Dilute and flush to wastewater treatment or absorb with inert material. Do not allow the material to enter streams or waterways.

**Waste Disposal Method**
- Place in a disposal facility approved under RCRA regulation for hazardous waste.

**Precautions to Be Taken in Handling and Storing**
- Keep away from heat, sparks and open flames. Keep containers tightly closed. Store away from strong oxidizing agents in a cool and dry place.

### Section VIII - Control Measures

**Respiratory Protection (Specify Type)**
- Do not breathe vapor or mist.

**Ventilation**
- Local Exhaust: Good ventilation should be used.
- Mechanical (General): Explosion-proof ventilation equipment.
- Special: Use with exhaust equipment with discharge to outdoors.
- Other: No smoking or open flames.

**Protective Gloves**
- Chemically resistant gloves.

**Eye Protection**
- Chemical splash goggles or face shield.

**Other Protective Clothing or Equipment**
- Usually not needed.

**Work/Hygiene Practices**
- Follow regulations appropriate for handling flammable chemicals.

### Section IX - Transport Information

**Non-hazardous. Liquid. Keep in upright position as indicated by arrows.**