Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

**Common Name/Trade Name**
1,3-Dimethyl-2-imidazolidinone

**Catalog Number(s)**
D2764

**CAS#**
80-73-9

**RTECS**
NJ0660000

**TSCA**
TSCA 8(b) inventory: No products were found. Not listed on TSCA 8(b) Inventory.

**CI#**
Not available.

**Manufacturer**
SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

**Commercial Name(s)**
Karbomos TeEM; Rhonite 1; DMEU; DMI

**Synonym**
1,3-Dimethylethyleneurea;
NN-Dimethylethyleneurea;
NN-Dimethylimidazolidinone;
NN-Dimethylimidazolidone

**Chemical Name**
2-Imidazolidinone, 1,3-dimethyl-

**Chemical Family**
Not available.

**Chemical Formula**
C5-H10-N2-O

**Supplier**
SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Section 2. Composition and Information on Ingredients

**Name**
1) {1,3-Dimethyl-2-imidazolidinone

**Exposure Limits**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) {1,3-Dimethyl-2-imidazolidinone</td>
<td>80-73-9</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Toxicological Data on Ingredients**

**ORAL (LD50):** Acute: 1261 mg/kg [Rat].
**DERMAL (LD50):** Acute: 986 mg/kg [Rabbit].

Section 3. Hazards Identification

**Potential Acute Health Effects**
Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion. Slightly hazardous in case of inhalation.

**Potential Chronic Health Effects**
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.

Continued on Next Page
### Section 4. First Aid Measures

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention. |
| Skin Contact | In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| Serious Skin Contact | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Serious Inhalation | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Serious Ingestion | Not available. |

### Section 5. Fire and Explosion Data

| Flammability of the Product | Combustible. |
| Auto-Ignition Temperature | 305°C (581°F) |
| Flash Points | CLOSED CUP: 93°C (199.4°F). |
| Flammable Limits | LOWER: 1.3%  UPPER: 8.4% |
| Products of Combustion | These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...). |
| Fire Hazards in Presence of Various Substances | Flammable in presence of open flames and sparks, of heat. |
| Fire Fighting Media and Instructions | SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. |
| Special Remarks on Fire Hazards | Not available. |
| Special Remarks on Explosion Hazards | Not available. |

### Section 6. Accidental Release Measures

| Small Spill | Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. |
| Large Spill | Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. |
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage
Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Hygroscopic. Sensitive to light. Store in light-resistant containers.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Personal Protection
Splash goggles. Lab coat. Gloves. Respiratory protection is not necessary for normal handling. Adequate general (room) ventilation or local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Odor</th>
<th>Taste</th>
<th>Color</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Molecular Weight</th>
<th>114.15 g/mole</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (1% soln/water)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>225°C (437°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>8°C (46.4°F)</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.06 (Water = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water/Oil Dist. Coeff.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ionicity (in Water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Dispersion Properties</td>
<td>See solubility in water.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in cold water, hot water.</td>
</tr>
</tbody>
</table>

Continued on Next Page
### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stability</strong></td>
<td>The product is stable.</td>
</tr>
<tr>
<td><strong>Instability Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Conditions of Instability</strong></td>
<td>Excess heat, ignition sources, incompatible materials</td>
</tr>
<tr>
<td><strong>Incompatibility with various</strong></td>
<td>Reactive with oxidizing agents.</td>
</tr>
<tr>
<td><strong>substances</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Corrosivity</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Special Remarks on Reactivity**
Also incompatible with acid chlorides, phosphorous halides. Sensitive to light. Hygroscopic; keep container tightly closed.

**Special Remarks on Corrosivity**
Not available.

**Polymerization**
Will not occur.

### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Route of Entry</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Routes of Entry</strong></td>
<td>Absorbed through skin.  Dermal contact.  Eye contact.  Ingestion.</td>
</tr>
</tbody>
</table>

**Toxicity to Animals**
Acute oral toxicity (LD50): 1261 mg/kg [Rat].
Acute dermal toxicity (LD50): 986 mg/kg [Rabbit].

**Chronic Effects on Humans**
Not available.

**Other Toxic Effects on**
Humans
Hazardous in case of skin contact (irritant, permeator), of ingestion. Slightly hazardous in case of inhalation.

**Special Remarks on**
Toxicity to Animals
Lethal Dose/Conc 50% Kill:
LD50[Rat] - Route: Oral; Dose 1190 uL/kg.
LD50[Rabbit] - Route: Skin; Dose 930 uL/kg.

**Special Remarks on**
Chronic Effects on Humans
Not available.

**Special Remarks on other**
Toxic Effects on Humans
Acute Potential Health Effects:
Skin: Causes skin irritation. Harmful if absorbed through skin.
Eyes: Causes eye irritation.
Inhalation: Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion: May be harmful if swallowed. Causes gastrointestinal tract irritation with nausea, vomiting, and diarrhea. May also affect behavior/central nervous system (tremor, somnolence), respiration (respiratory stimulation).

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecotoxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>BOD5 and COD</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Products of Biodegradation**
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products**
The products of degradation are less toxic than the product itself.

**Special Remarks on the**
Products of Biodegradation
Not available.
Section 13. Disposal Considerations

Waste Disposal
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification
CLASS 6.1: Poisonous material.

Identification
UNNA: 2810: Toxic liquid, organic, n.o.s (1,3-dimethyl-2-imidazolidinone)  PG: III

Special Provisions for Transport
Not available.

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
No products were found.

California Proposition 65 Warnings
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

Other Regulations
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 201-304-8).
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non-Domestic Substances List (NDSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications
WHMIS (Canada) CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC) R21/22- Harmful in contact with skin and if swallowed.
R36/38- Imitating to eyes and skin.
S2- Keep out of the reach of children.
S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

HMSC (U.S.A.)

| Health Hazard | 2 |
| Fire Hazard | 2 |
| Reactivity | 0 |
| Personal Protection | j |

WHMIS (Canada) (Pictograms)

Continued on Next Page
Wear appropriate respirator when ventilation is inadequate.

Lab coat.

Splash goggles.

Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>D0078</th>
</tr>
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<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 9/2/2008.

Verified by Sonia Owen.

Printed 9/10/2008.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.