1. Chemical Product and Company Identification

Product Name: Kemamide W -40
Distributed By: HB Chemical
1665 Enterprise Parkway
Twinsburg Oh 44087
Phone - 330-920-8023

MSDS Prepared By (w Suppliers Input): HB Chemical
Chemical Name / Family: Amide
CAS NO#: 110-30-5
Product Use: Chemical intermediate.
OSHA Status: Not Hazardous

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

Classification: OSHA Regulatory Status This chemical is not considered hazardous by the 2012 OSHA Hazard communication Standard (29 CFR 1910.122). Not a dangerous substance or mixture according to the Globally Harmonized System. (GHS)

Signs and Symptoms of Exposure: Handle in accordance with good industrial hygiene and safety practice. The product contains no substances which at their given concentration, are considered to be hazardous to health.

Precautionary Statements: Get medical advice/attention if you feel unwell.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POSION CENTER or doctor/physician.

Ingestion: Rinse mouth. DO NOT induce vomiting. Drink 1 or 2 glasses of water. Get medical advice/attention if you feel unwell.
Hazards not otherwise classified (HNOC): Dust can form an explosive mixture with air.

Other Information: Unknown Acute Toxicity 0% of the mixture consists of ingredient of unknown toxicity.

3. Composition / Information on Ingredients

Chemical Family: Amide

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene bis stearamide</td>
<td>110-30-5</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First Aid Measures

Eye contact: Molten product can cause thermal burns. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. (Call a physician if irritation persists).

Skin Contact: Molten product can cause thermal burns. In case of burns, immediately cool affected skin for as long as possible with cold water. Wash off immediately with plenty of water for at least 15 minutes. (Get medical attention immediately if symptoms occur.).

Inhalation: Remove to fresh air. (Get medical attention immediately if symptoms occur.).

Ingestion: Molten product can cause thermal burns. Clean mouth with water and drink afterwards plenty of water. (Get medical attention immediately if symptoms occur.).

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.
### Specific hazards arising from the Chemical:

Avoid creating dust. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritation and toxic gases and vapors. Do not allow run-off from fire-fighting to enter drinks or water course.

### Special Fire Fighting Procedures:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### Hazardous Combustion Products:

Carbon monoxide. Carbon dioxide (CO2), Nitrogen Oxides (NOx).

### Explosion data:

Sensitivity to Mechanical Impact & Static Discharge: None.

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### 6. Accidental Release Measures

**Personal precautions:**

Ensure adequate ventilation, especially in confined areas. Avoid creating dust. Dust can form an explosive mixture with air.

**Environmental precautions:**

See Section 12 for additional ecological information. The product is insoluble and floats on water. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

**Methods and material for containment and Cleaning up:**

Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Where possible allow molten material to solidify naturally.

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### 7. Handling and Storage:

**Precautions to be taken in handling:**

Handle in accordance with good industrial hygiene and safety practice.

**Storage:**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials:**

Incompatible with oxidizing agents.

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### 8. Exposure Controls / Personal Protection

**Exposure Guidelines:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>PMC OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>DUST</td>
<td>TWA: 10 mg/m³ Inh</td>
<td>TWA: 15 mg/m³ Resp</td>
<td>TWA: 5 mg/m³ Resp</td>
</tr>
</tbody>
</table>

**Respiratory Protection:**

If exposure limits are exceeded or irritation is experienced,
NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Protective Gloves:  Heat resistant gloves are recommended when handling molten materials.

Eye Protection:  Wear safety glasses with side shields or goggles.

Other Precautions:  Avoid contact with skin, eyes or clothing. Avoid breathing (dust, vapor, mist, gas). Wash face, hands and any exposed skin thoroughly after handling. Use personal protective equipment as required.

Decontamination Facilities:  Eye bath, washing facilities (sinks / showers)

### 9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>flakes, molten, pellets, powder</td>
</tr>
<tr>
<td>Odor:</td>
<td>Slight characteristic</td>
</tr>
<tr>
<td>Color:</td>
<td>white</td>
</tr>
<tr>
<td>Odor threshold :</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>140-147 °C / 248-297 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>260 °C / 500 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>280 °C / 536 °F</td>
<td>Pensky-Marten closed cup ASTM D 93</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1.3 x 10E 10 kPa</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Log Kow 13.98 (EPIWIN)</td>
<td></td>
</tr>
<tr>
<td>Auto ignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Dust can form an explosive mixture with air</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>593.03</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>0</td>
</tr>
<tr>
<td>Density</td>
<td>0</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

**Stability:** Stable under recommended storage conditions.

**Incompatibility (Materials to Avoid):** Incompatible with oxidizing agents.

**Conditions to Avoid:** Avoid creating dust. Dust can form an explosive mixture with air. Extremes of temperature and direct sunlight.

**Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx)

**Possibility of Hazardous Reactions:** None under normal processing

**Hazardous polymerization:** Hazardous polymerization does not occur.

11. Toxicological Information

**Information on likely routes of exposure**

**Product Information:** Product does not present an acute toxicity hazard based on known or supplied information

**Inhalation:** Inhalation of dust in high concentration may cause irritation of respiratory system. No know effect based on information supplied.

**Eye contact:** Dust contact with the eyes can lead to mechanical irritation. Molten product can cause thermal burns.

**Skin Contact:** Molten product can cause thermal burns.

**Ingestion:** No data available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50 (mg/kg, Rat)</th>
<th>Dermal LD50 (mg/kg, Rabbit)</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene bistearamide</td>
<td>&gt; 5000</td>
<td>&gt; 2000</td>
<td></td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms:** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization:** No information available.

**Germ cell mutagenicity:** No information available.

**Carcinogenicity:** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
12. Ecological Information

Ecotoxicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene bisstearamide</td>
<td>&gt;1000 mg/L: LC50 (rainbow trout; 96h)</td>
<td>&gt; 300 mg/L: LC50 (medaka-48h)</td>
<td>140 mg/L: EC50 (Daphnia magna-48h)</td>
</tr>
</tbody>
</table>

Persistence and degradability: NOT READILY BIODEGRADABLE.

Bioaccumulation: Not Likely.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene bisstearamide</td>
<td>13.98</td>
</tr>
</tbody>
</table>

Other adverse effects: No information available.

13. Disposal Considerations

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

D.O.T. Shipping Name Not regulated

Air - ICAO (international Civil Aviation Organization) Not regulated

Sea - IMDG (International Maritime Dangerous Goods) Not regulated
15. Regulatory Information

All of the components in the product are on the following Inventory lists. The classification and labeling information in this Safety Data Sheet should be viewed as provisional.

International Inventories

- EINECS/ELINCS Complies
- TSCA Complies
- AICS Complies
- DSL/NDSL Complies
- ENCS Complies
- KECL Complies
- PICCS Complies
- IECSC Complies
- NZIoC Complies

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances
- NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Any Substance regulated Title 40 of the Code of Federal Regulations, Part 372 is listed below, if it exists.

SARA 311/312 Hazard Categories

- Acute health hazard No
- Chronic Health Hazard No
- Fire hazard No
- Sudden release of pressure hazard No
- Reactive Hazard No

CWA (Clean Water Act)
Any Substance regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) is listed below, if it exists.

CERCLA
Any Substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) is listed below, if it exists.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number Not Applicable

16. Other Information

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards 1</th>
<th>Flammability 1</th>
<th>Instability 0</th>
<th>Physical and Chemical Properties - Personal protection X</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards 1</td>
<td>Flammability 1</td>
<td>Physical hazards 0</td>
<td>X</td>
</tr>
</tbody>
</table>

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.