Hydrogenated Tallow Amine Distilled

SECTION 1: IDENTIFICATION

Product Name: Hydrogenated Tallow Amine Distilled

CAS Number: 61788-45-2

Chemical Name: Hydrogenated Tallow Amine Distilled

Synonyms: Hydrogenated Tallow, Distilled

Company
Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
Suite #C
Seattle WA 98109, USA

Business Contact
Customer Service: 1-866-282-3384
info@silverfernchemical.com

24 Hour Emergency Contact
Infotrac 800-535-5053
Outside USA & Canada 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

Danger

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H333: May be harmful if inhaled

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Content (W/W)</th>
<th>Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>61788-45-2</td>
<td>100%</td>
<td>Hydrogenated Tallow Amine</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical advice/attention

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: >120°C (298.4°F)

Lower/Upper explosion limit: N/A

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

Advice for firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Individuals involved in cleanup activities must use appropriate protective equipment as listed in Section 8. This material forms slippery surfaces on floors, posing an accident risk. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, and then place into a suitable container for disposal. Avoid generating dusty conditions.

Environmental precautions:
If material is released into the environment (air, land, water - via sewage system), the user should determine whether spill must be reported to appropriate local, state, and/or federal authorities.

Evacuation Procedures:
Provide ventilation. Isolate spill area and restrict non-essential personnel from area. All personnel involved in spill cleanup should follow good industrial hygiene practices.

SECTION 7: HANDLING AND STORAGE

Handling: Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use with adequate ventilation. Avoid breathing vapor.

Storage: Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area.
SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protective Equipment (PPE)

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits
Hydrogenated Tallow Amine: No ACGIH, NIOSH, OSHA-Final PELs and OSHA Vacated PELs are listed.

Personal Protective Equipment
Eyes - Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin - Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing - Wear appropriate protective clothing to minimize contact with skin.

Respirators - Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White flakes</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammoniacal</td>
</tr>
<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point/freezing Point</td>
<td>45-55°C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>232°C @ 32mmHg</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;120 °C (298.4 °F)</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Negligible</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 300°C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>no data available</td>
</tr>
<tr>
<td>Surface tension</td>
<td>38 mN/m at 15 °C (59 °F)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.83 gm/cm³</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Conditions to avoid: Dust generation, excess heat.

Substances to avoid: Strong oxidizing agents, strong acids, aluminum.
Hazardous reactions: Stable under recommended storage conditions.

Decomposition products: Nitrogen oxides, carbon monoxide, carbon dioxide. Hazardous Polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

LD50/LC50 - CAS# 61788-45-2
Draize test, rabbit, skin: 20 mg/24H Moderate; Oral, mouse: LD50 = 3 gm/kg;
Oral, rat: LD50 = 2395 mg/kg;

Carcinogenicity - CAS# 61788-45-2
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Additional Information
RTECS: RG4150000

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
This product is expected to be moderately toxic to aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Product
As originally offered, this product if disposed of, is not considered a hazardous waste under current Resource Conservation and Recovery Act (RCRA) regulations (40CFR 261). State and local regulations should also be consulted regarding proper disposal.

SECTION 14: TRANSPORT INFORMATION

DOT (US)
UN number: 3259   Class: 8 (3)   Packing group: III
Proper shipping name: Amines, Solid, Corrosive N.O.S.
Reportable Quantity (RQ): N/A
Marine pollutant: No
Poison Inhalation Hazard: No

IATA
UN number: 3259   Class: 8 (3)   Packing group: III
Proper shipping name: Amines, Solid, Corrosive N.O.S.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL
TSCA
CAS# 61788-45-2 is listed on the TSCA inventory.

Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.
Section 12b: None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR.

SARA
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
Section 313: No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

SECTION 16: OTHER INFORMATION

DISCLAIMER OF RESPONSIBILITY

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