Section 1: Product and Company Identification

Product Name: ADDOCAT 1872 396D/1584S
Article Number: 56453648

Section 2: Composition/Information on Ingredients

HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name/ CAS Number</th>
<th>Exposure Limits</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,3-Dimethyltetrahydropyrimidine CAS# is a trade secret</td>
<td>OSHA (PEL): Not Established</td>
<td>100%</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Corrosive. Toxic. Color: Colorless to Yellow Form: Liquid Odor: Pungent odor (Amine like)
Causes respiratory tract burns. Causes skin burns. Causes eye burns. Causes digestive tract burns. Harmful if swallowed. Irritating gases/fumes are given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS

Route(s) of Entry: Inhalation, Skin Contact, Eye Contact, Ingestion
HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation Hazards
Acute Inhalation Hazards: Inhalation of this product is expected to cause significant irritation to the lungs, nose and respiratory tract and may be corrosive to the tissue.

Chronic Inhalation Hazards: Expected to be similar to those for acute inhalation.

Skin Hazards
Acute Skin Hazards: It is possible depending on concentration and duration of contact for the liquid to cause severe irritation with skin necrosis (permanent cell damage). Per the supplier, this product is considered to be corrosive to the skin causing possible chemical burns and scarring.

Chronic Skin Hazards: It is expected that chronic skin exposure will be similar to that listed for acute skin exposure.

Eye Hazards
Acute Eye Hazards: At elevated temperatures the vapors from this product may cause severe irritation marked by redness, tearing and possible burns. Contact with the eyes, liquid and vapors, causes severe irritation, pain and burns, possibly severe.

Chronic Eye Hazards: Effects are expected to be similar to those listed above for acute eye exposure.

Ingestion Hazards
Acute Ingestion Hazards: Can result in irritation and corrosive action in the mouth, stomach tissue and digestive tract.

Chronic Ingestion Hazards: None reported for this product as a whole, expected to be similar to those listed for acute ingestion.

Carcinogenic Components:
NTP: None
IARC: None
OSHA: None

Section 4: First Aid Measures

First Aid for Eye: In case of contact, flush eyes with large quantities of water for at least 15 minutes. The eyelids should be held apart during irrigation to ensure thorough flushing of all eye tissue. Get medical attention.

First Aid for Skin: Immediately remove contaminated clothing and shoes. In case of skin contact, wash affected areas with soap and water. Get medical attention if irritation develops or persists. Wash clothing and clean shoes before reuse.

First Aid for Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
**First Aid for Ingestion:**

If material is ingested, do not induce vomiting unless directed to do so by medical personnel. Call a physician immediately.

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**Section 5: Fire Fighting Measures**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flash Point:</strong></td>
<td>91 °C</td>
</tr>
<tr>
<td><strong>Flammable Limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Upper Explosion Limit (UEL %):</td>
<td>Not Established</td>
</tr>
<tr>
<td>Lower Explosion Limit (LEL %):</td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Auto-ignition Temperature:</strong></td>
<td>290 °C</td>
</tr>
<tr>
<td><strong>Extinguishing Media:</strong></td>
<td></td>
</tr>
<tr>
<td>Suitable:</td>
<td>Water, Foam, Dry Chemical, Carbon Dioxide</td>
</tr>
<tr>
<td><strong>Special Fire Fighting Procedures:</strong></td>
<td></td>
</tr>
<tr>
<td>Evacuate non-emergency personnel to a safe area. Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. Contain fire fighting water for treatment and proper disposal. Use cold water spray to cool fire exposed containers.</td>
<td></td>
</tr>
</tbody>
</table>

**Section 6: Accidental Release Measures**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spill or Leak Procedures:</strong></td>
<td></td>
</tr>
<tr>
<td>Evacuate area and stay upwind. Emergency clean-up personnel should wear appropriate protection when entering the spill area for clean-up. Keep from entering water or ground water. Cover spill with absorbent material, such as sand, sweeping compound or diatomaceous earth; collect material for disposal. Ventilate area to remove vapors.</td>
<td></td>
</tr>
</tbody>
</table>

**Section 7: Handling and Storage**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage Temperature:</strong></td>
<td></td>
</tr>
<tr>
<td>Minimum:</td>
<td>10 °C</td>
</tr>
<tr>
<td>Maximum:</td>
<td>30 °C</td>
</tr>
<tr>
<td><strong>Shelf Life:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Handling/Storage Precautions:</strong></td>
<td></td>
</tr>
<tr>
<td>Avoid inhalation and skin or eye contact with processing fumes. Use local exhaust ventilation above processing equipment. Use with adequate ventilation. Do not get in eyes. Do not get on skin or clothing. Do not taste or swallow. Wash thoroughly after handling. Do not breath dust, vapors or mist. Store away from food and beverages. Keep away from heat, sparks and flames. Keep container tightly closed when not in use.</td>
<td></td>
</tr>
</tbody>
</table>
Section 8: Exposure Controls/Personal Protection

**Personal Protection Equipment**

**Eye Protection Requirements:** Chemical safety goggles. In a splash hazard environment chemical goggles should be used in combination with a full face-shield.

**Skin Protection Requirements:** Permeation resistant gloves (neoprene, nitrile, or PVC) and impervious clothing (long sleeve shirts) are recommended.

**Ventilation Requirements:** Use local exhaust ventilation if dusting or misting is a problem, to maintain air levels below the recommended exposure limit.

**Respirator Requirements:** An organic vapor cartridge should be used if ventilation is not sufficient to control fumes released during thermal processing. In areas of high concentrations, confined space or other poorly ventilated areas and for large spill clean-up sites, fresh air-line respirators or self-contained breathing apparatus should be used. Observe OSHA regulations for respirator use (29 CFR 1910.134.)

Section 9: Physical and Chemical Properties

- **Physical Form:** Liquid
- **Color:** Colorless to Yellow
- **Odor:** Pungent odor (Amine like)
- **pH:** 11
- **Boiling Point:** 185 °C
- **Pour Point:** -60 °C
- **Viscosity:** 2 mPa.s @ 20 °C
- **Solubility in Water:** Miscible
- **Specific Gravity:** 0.965 @ 20 °C
- **Vapor Pressure:** 0.75 mmHg @ 20 ºC

Section 10: Stability and Reactivity

- **Stability:** Stable
- **Hazardous Polymerization:** Will not occur
- **Substances to Avoid:** Acids., Isocyanates
- **Conditions to Avoid:** Avoid contact with incompatible materials., Avoid heat, flames, sparks and other sources of ignition.
- **Decomposition Temperature:** Not Established
- **Decomposition Products:** Oxides of carbon, Oxides of nitrogen, and other undetermined fragments.
Section 11: Toxicological Information

Toxicity Data for ADDOCAT 1872_396D/1584S
Toxicity Note: No data available for this product.

Toxicity Data for 2,3-Dimethyltetrahydropyrimidine
Acute oral toxicity: LD50 = 1,400 mg/kg (Male Rat)
Acute dermal toxicity: LD50 = 725 mg/kg (Rat)
Eye Irritation: Corrosive (Rabbit)
Skin Irritation: Corrosive (Rabbit)

Section 12: Ecological Information

Ecological Data for ADDOCAT 1872_396D/1584S
Ecological Note: No data available for this product.

Ecological Data for 2,3-Dimethyltetrahydropyrimidine
Ecological Note: No data available for this component.

Section 13: Disposal Considerations

Waste Disposal Method: Disposal must be in compliance with federal, state and local environmental control regulations.

Empty Container Precautions: Recondition or dispose of empty container in accordance with government regulations.

Other Disposal Notes: Rhein Chemie requires that CHEMTREC be immediately notified (800-424-9300) when this product is unintentionally released from its container during its course of distribution, regardless of the amount released. Such notification must be immediate and made by the person having knowledge of the release. Distribution includes transportation, storage incidental to transportation, loading and unloading.

Section 14: Transportation Information

Technical shipping name: 2,3-Dimethyltetrahydropyrimidine

Product Label: Product Label Established

Domestic Surface Transportation (DOT)
Proper Shipping Name: Corrosive liquid, toxic, n.o.s. (2,3-Dimethyltetrahydropyrimidine)
Hazard Class or Division: 8, 6.1
UN/NA Number: UN2922
Packing Group: II
Hazard Label(s): Corrosive, Toxic
Hazard Placard(s): Corrosive, Toxic

Marine Transportation (IMO / IMDG)
Proper Shipping Name: Corrosive liquid, toxic, n.o.s. (2,3-Dimethyltetrahydropyrimidine)
Hazard Class Division Number:
UN/NA Number: UN2922
Packing Group: II
Hazard Label(s): Corrosive, Toxic
Hazard Placard(s): Corrosive, Toxic

Air Transportation (ICAO / IATA)
Proper Shipping Name: Corrosive liquid, toxic, n.o.s. (2,3-Dimethyltetrahydropyrimidine)
Hazard Class Division Number:
UN/NA Number: UN2922
Subsidiary Risk: 6.1
Packing Group: II
Hazard Label(s): Corrosive, Toxic
Radioactive?: Non-Radioactive
Passenger Air - Max. Qty.: 1 L
Passenger Packing Instruction: 808
Cargo Air - Max. Qty.: 30 L
Cargo Air Packing Instruction: 812

Section 15: Regulatory Information

United States Federal Regulations
OSHA Hazcom Standard Rating: Hazardous
TSCA Inventory List: On TSCA Inventory

CERCLA Hazardous Substance:
Component(s) Reportable Quantity
None

SARA Title III
SARA Section 302 Extremely Hazardous Substances:
Component(s)/ Concentration
CAS Number Min. Max.
None

SARA Section 311/312 Hazard Categories:
Immediate Health Hazard

SARA Section 313 Toxic Chemicals:
RCRA Status: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product, should be classified as a hazardous waste. (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

State Right-to-Know Information

<table>
<thead>
<tr>
<th>Component(s)/CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Code</td>
</tr>
</tbody>
</table>

State Code Translation Table

Section 16: Other Information

HMIS Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
* = Chronic Health Hazard

RHEIN CHEMIE CORPORATION’s method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by RHEIN CHEMIE CORPORATION as a customer service.

Contact: HES Dept.
Phone: (440) 285-3547
MSDS Number: 000000006242
Version Date: 12/17/2007
MSDS Version: 1.0

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Indicates Relevant Change Made.