MATERIAL SAFETY DATA SHEET

ADDOCAT DB 396D/1584S

RHEIN CHEMIE CORPORATION
145 Parker Court
Chardon, OH 44024

TRANSPORTATION EMERGENCY
CALL CHEMTREC.........: (800) 424-9300
INTERNATIONAL ...........: (703) 527-3887

NON-TRANSPORTATION
RCC EMERGENCY PHONE : (440) 285-3547
RCC INFORMATION PHONE: (800) 289-2436

Section 1: Product and Company Identification

Product Name: ADDOCAT DB 396D/1584S
Article Number: 2282630
Chemical Family: Tertiary Aliphatic Amine
Chemical Name: N,N-dimethylbenzylamine
Synonyms:

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>Benzylmethylamine 103-83-3</td>
<td>OSHA (PEL): Not Established</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>ACGIH (TLV): Not Established</td>
<td></td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Corrosive. Flammable. Color: Colorless to Yellow Form: Liquid Odor: Pungent odor (Amine like)
May cause eye, skin, and respiratory tract irritation. May cause eye, skin, and respiratory tract burns. Harmful if inhaled. Toxic gases/fumes are given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS
**Route(s) of Entry:** Inhalation, Eye Contact, Ingestion, Skin Contact

**HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE**

**Inhalation Hazards**
**Acute Inhalation Hazards:** Harmful if inhaled. Corrosive substances may cause symptoms of respiratory tract irritation possibly including coughing, choking, pain in the nose, mouth, and throat and burns of the mucous membranes.

**Chronic Inhalation Hazards:** Depending on the concentration and duration of exposure to the amine vapors, repeated or prolonged exposure may cause inflammatory and ulcerative changes in the mouth and possibly bronchial and gastrointestinal disturbances.

**Skin Hazards**
**Acute Skin Hazards:** Product is considered corrosive to the skin and is expected to cause severe skin damage resulting in dermatitis and deep burns.

**Chronic Skin Hazards:** Repeated or prolonged contact may result in dermatitis or effects similar to acute exposure.

**Eye Hazards**
**Acute Eye Hazards:** Contact of undiluted product with the eyes can cause severe irritation and pain and may cause permanent injury. This product may cause severe irritation, redness, blurred vision, conjunctivitis, dermatitis, iritis and corneal burns.

**Chronic Eye Hazards:** Effects depend on concentration and duration of exposure. Effects are expected to be similar to those listed above for acute eye exposure.

**Ingestion Hazards**
**Acute Ingestion Hazards:** However, if ingested this product can be corrosive to the mouth, throat, esophagus and stomach and may cause severe painful gastrointestinal distress, accompanied by nausea, headache, vomiting and diarrhea.

**Chronic Ingestion Hazards:** Ingestion of this product may result in inflammatory and ulcerative effects on the oral mucous membranes.

**Carcinogenic Components:**
**NTP:** None

**IARC:** None

**OSHA:** None

**Medical Conditions Aggravated by Exposure:** May aggravate existing eye, skin or respiratory conditions.

**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. Call a physician immediately.

**First Aid for Skin:** Immediately remove contaminated clothing and shoes. Immediately proceed to an emergency safety shower. In case of skin contact, wash affected areas with soap and water. Avoid using hot water and hard rubbing. Get medical attention. Wash clothing and clean shoes before reuse.

**First Aid for Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

**First Aid for Ingestion:** If material is ingested, do not induce vomiting unless directed to do so by medical personnel. Give victim one or two glasses of water or milk. Never give anything by mouth to an unconscious person. Call a physician immediately. Should vomiting occur, keep patients head below hip level to prevent aspiration of fluid into the lungs.

**Note to Physician:** Treat symptomatically. Inducing vomiting is contraindicated because of the irritating nature of the product.

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**Section 5: Fire Fighting Measures**

**Flash Point:** 140 °F (60 °C) DIN 22719

**Flammable Limits:**

- **Upper Explosion Limit (UEL %):** Not Established
- **Lower Explosion Limit (LEL %):** Not Established

**Auto-ignition Temperature:** 410 °C DIN 51794

**Extinguishing Media:**

- **Suitable:** Dry Chemical, Carbon Dioxide, Foam, Water spray for large fires.

**Special Fire Fighting Procedures:** Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion. Use cold water spray to cool fire exposed containers.

**Unusual Fire/Explosion Hazards:** None known.

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**Section 6: Accidental Release Measures**

**Spill or Leak Procedures:** Extinguish all ignition sources. Utilize protective clothing and equipment. Ventilate area to remove vapors. Do not allow spilled or released material to enter ground water, waste water or soil. Notify local health authorities and other appropriate agencies if such contamination should occur. Cover spill with absorbent material, such as sand, sweeping compound or diatomaceous earth; collect
material for disposal.

Section 7: Handling and Storage

Storage Temperature:
Minimum: 68 °F (20 °C)
Maximum: 81 °F (27 °C)

Shelf Life: Not Determined


Handling/Storage Precautions: Store in a dry place away from excessive heat. Do not reseal container if contamination is suspected. Do not breath dust, vapors or mist. Do not get in eyes. Do not taste or swallow. Do not get on skin or clothing. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practices.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment
Eye Protection Requirements: Chemical safety goggles, full-face shield. If vapor exposure is causing irritation, use a full-face, air-supplied respirator. In a splash hazard environment chemical goggles should be used in combination with a full face-shield. Vapor resistant goggles should be worn when contact lenses are in use.

Skin Protection Requirements: Permeation resistant gloves (neoprene, nitrile, or PVC) and impervious clothing (long sleeve shirts) are recommended. Cover as much of the exposed skin area as possible with appropriate clothing, coveralls, apron and boots.

Ventilation Requirements: Use local exhaust ventilation if dusting or misting is a problem, to maintain air levels below the recommended exposure limit. Standard reference sources regarding industrial ventilation (i.e., ACGIH Industrial Ventilation) should be consulted for guidance about adequate ventilation.

Respirator Requirements: 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. A supplied air respirator (either positive pressure or continuous flow type) is required. Observe OSHA regulations for respirator use (29 CFR 1910.134.)

Additional Protective Measures: Safety showers and eyewash stations should be accessible to the work area. Educate and train employees on the safe use and handling of this product. Follow all label instructions. For additional information, contact Bayer Product Safety and Regulatory Affairs Department for Polymers.
Section 9: Physical and Chemical Properties

Physical Form: Liquid
Color: Colorless to Yellow
Odor: Pungent odor (Amine like)
Odor Threshold: Not Established
pH: Not Established
Boiling Point: Approximately 180 °C
Melting/Freezing Point: Not Established
Viscosity: 3 mPa.s @ 68 °F (20 °C)
Solubility in Water: Insoluble
Specific Gravity: 0.9 @ 77 °F (25 °C)
Bulk Density: Approximately 8.08 lb/gal
Vapor Pressure: < 0.00001 mmHg @ 20 °C
Vapor Density: Not Established
VOC by Weight: Not Established
HOC by Weight: None

Section 10: Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur  None Known
Substances to Avoid: Acids., Oxidizing agents., Combustible materials.
Conditions to Avoid: Avoid heat, flames, sparks and other sources of ignition.
Decomposition Products: Oxides of carbon, Oxides of nitrogen, and other undetermined fragments.

Section 11: Toxicological Information

Toxicity Data for ADDOCAT DB 396D/1584S
Acute oral toxicity: LD50 = 265 mg/kg (Rat)  Source: Occupational Health Services (OHS) MSDS
Acute dermal toxicity: LD50 = 1,660 mg/kg (Rabbit)  Source: Occupational Health Services (OHS) MSDS
Eye Irritation: Severely irritating (Rabbit)  Source: Occupational Health Services (OHS) MSDS
Skin Irritation: Severely irritating 4 hrs, (Rabbit)  Source: Occupational Health Services (OHS) MSDS

Toxicity Data for Benzylmethylamine
Toxicity Note: No data available for this component.
Section 12: Ecological Information

Ecological Data for ADDOCAT DB 396D/1584S

Fish Toxicity: 37,800 ug/L, 96 hrs. Fathead minnow (Pimephales promelas)
Source: Occupational Health Services (OHS) MSDS

Ecological Note: Water Pollution Class WGK 2 - impairment of water quality
(German Water Resources Act) Occupational Health Services (OHS) MSDS

Ecological Data for Benzylmethylamine

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. Incineration is the preferred method of disposal.

Empty Container Precautions: Empty container retains product residue and can be hazardous. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Vapors and gases may be highly toxic.

Section 14: Transportation Information

Technical shipping name: Aromatic Compound

Freight Class
Bulk: Chemicals, N.O.I. (NMFC 60000)
Package: Chemicals, N.O.I. (NMFC 60000)

Product Label: Product Label Established

Domestic Surface Transportation (DOT)
Proper Shipping Name: Benzylidimethylamine
Hazard Class or Division: 8, 3
UN/NA Number: UN2619
Packing Group: II
Hazard Label(s): Corrosive, Flammable Liquid
Hazard Placard(s): Corrosive, Flammable

Marine Transportation (IMO / IMDG)
Proper Shipping Name: Benzylidimethylamine
Hazard Class Division: 8, 3
Number: 
UN Number: UN2619
Packaging Group: II
Hazard Label(s): Corrosive, Flammable Liquid
Hazard Placard(s): Corrosive, Flammable Liquid

Air Transportation (ICAO / IATA)
Proper Shipping Name: Benzyldimethylamine
Hazard Class Division: 8
Number: UN2619
Subsidiary Risk: 3
Packing Group: II
Hazard Label(s): Corrosive, Flammable Liquid
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)/ CAS Number Concentration
None Min. Max.

SARA Section 311/312 Hazard Categories:
Immediate Health Hazard, Delayed Health Hazard, Fire Hazard

SARA Section 313 Toxic Chemicals:
Component(s)/ CAS Number Reporting Threshold Concentration
None Min. Max.

RCRA Status: When discarded in its purchased form, this product meets the criteria of ignitability, and should be managed as a hazardous waste (EPA Hazardous Waste Number D001). (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

Component(s)/ Concentration

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Component(s)</th>
<th>State Code</th>
<th>Min.</th>
<th>Max.</th>
</tr>
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<tbody>
<tr>
<td>103-83-3</td>
<td>Benzylmethylamine</td>
<td>PA-N, NJ-H</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

The following component(s) are listed under New Jersey Special Hazards:

Benzylmethylamine | NJ-S | 100%
103-83-3

State Code Translation Table
PA-N = Pennsylvania Non-hazardous
NJ-H = New Jersey Hazardous Substance List
NJ-S = New Jersey Special Health Hazardous Substance List

Foreign Chemical Inventory List(s)

- EINECS (Europe): Listed
- DSL (Canada): Listed
- AICS (Australia): Listed
- MITI (Japan): Listed
- MOE (Korea): Listed
- PICCS (Philippines): Listed

Section 16: Other Information

NFPA 704M Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
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<tbody>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

HMIS Rating

<table>
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<th>Health</th>
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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: 00000001802
Version Date: 01/17/2006
MSDS Version: 3.0
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