MATERIAL SAFETY DATA SHEET

ADDOCAT 201 40P

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 201 40P
Article Number: 1569337

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>Dibutyltin Dilaurate 77-58-7</td>
<td>OSHA (PEL): 0.10 mg/m3 TWA</td>
<td>0% 100%</td>
</tr>
<tr>
<td></td>
<td>ACGIH (TLV): 0.20 mg/m3 STEL Skin 0.10 mg/m3 TWA Skin</td>
<td></td>
</tr>
</tbody>
</table>

Exposure limit for: Tin, Organic compounds, as Sn

Section 3: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Toxic. Color: Colorless Form: Liquid Odor: Mild Odor
May cause respiratory tract irritation. Causes skin irritation. Causes eye irritation. May be harmful if swallowed. Toxic gases/fumes are given off during burning or thermal decomposition.

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

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation Hazards
Acute Inhalation Hazards: This product may cause irritation of the respiratory tract and mucous membranes of the nose and throat. Higher concentrations of vapors are likely to produce more severe respiratory tract irritation. Effects depend on concentration and duration of exposure.

Chronic Inhalation Hazards: None reported for this product as a whole.

Skin Hazards
Acute Skin Hazards: This product can cause skin irritation. This product can also cause severe irritation with pain and blistering. Effects depend on concentration and duration of exposure.

Chronic Skin Hazards: None reported for this product as a whole.

Eye Hazards
Acute Eye Hazards: This product is considered an eye irritant. Effects depend on concentration and duration of exposure.

Chronic Eye Hazards: In addition to effects listed in acute exposure, repeated or prolonged contact may result in conjunctivitis.

Ingestion Hazards
Acute Ingestion Hazards: Ingestion of this product may be harmful or fatal.

Chronic Ingestion Hazards: None reported for this product as a whole.

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

Medical Conditions
Aggravated by Exposure: May aggravate skin 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. The eyelids should be held apart during irrigation to ensure thorough flushing of all eye tissue. Call a physician immediately.

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. 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.

Note to Physician: Treat symptomatically.

### Section 5: Fire Fighting Measures

**Flash Point:**

> 392 °F (> 200 °C)

**Flammable Limits:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Explosion Limit (UEL %):</td>
<td>Not Established</td>
</tr>
<tr>
<td>Lower Explosion Limit (LEL %):</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

**Auto-ignition Temperature:** Not Established

**Extinguishing Media:**

Suitable: Carbon Dioxide, Dry Chemical, 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. Use cold water spray to cool fire exposed containers. During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

### Section 6: Accidental Release Measures

**Spill or Leak Procedures:** Extinguish all ignition sources. Emergency clean-up personnel should wear appropriate protection when entering the spill area for clean-up. 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 the spill with absorbent material such as sand, sweeping compound or diatomaceous earth. Scoop up solid absorbent for waste disposal. Place in properly marked containers for disposal. Ventilate area to remove vapors. Spill area can be washed with water.

**Other Accidental Release 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 7: Handling and Storage

Storage Temperature: Store at ambient conditions

Shelf Life: Not Established

Handling/Storage Precautions: Handle in accordance with good industrial hygiene and safety practices. Do not get on skin or clothing. Do not get in eyes. Do not breath dust, vapors or mist. Keep away from heat, sparks and flames. Use with adequate ventilation. Storage area should be equipped with sprinkler system.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment
Eye Protection Requirements: Chemical safety goggles, full-face shield.

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

Ventilation Requirements: Engineering controls should be sufficient to ensure airborne levels do not approach or exceed the exposure limits listed in Section 2. Thermal processing equipment should be ventilated to control gases and fumes given off during processing.

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. The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA). Chemical cartridge respirator with face piece to protect against the organic vapor; supplied air respirator with full face piece; or in high vapor concentrations use self-contained breathing apparatus in pressure demand mode. Observe OSHA regulations for respirator use (29 CFR 1910.134.)

Additional Protective Measures: Emergency showers and eye wash stations should be available. Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees on the safe use and handling of this product.

Section 9: Physical and Chemical Properties

Physical Form: Liquid
Color: Colorless
Odor: Mild Odor
pH: Not Established
Boiling Point: > 392 °F (> 200 °C)
Melting/Freezing Point: 71.6 - 75.2 °F (22 - 24 °C)
Viscosity: Not Established
Solubility in Water: Insoluble
Solubility (non Aqueous): Not Established
Specific Gravity: 1.04 @ 77 °F (25 °C)
Evaporation Rate: Not Established
Vapor Pressure: Not Established
Vapor Density: Not Established

**Section 10: Stability and Reactivity**

Stability: Stable
Hazardous Polymerization: Will not occur
Substances to Avoid: Oxidizing agents.
Conditions to Avoid: High Heat.
Decomposition Temperature: Not Established
Decomposition Products: Thermal decomposition may produce toxic oxides and fumes of the components of this product and other potentially toxic fumes.

**Section 11: Toxicological Information**

**Toxicity Data for ADDOCAT 201 40P**
Toxicity Note: No data available for this product.

**Toxicity Data for Dibutyltin Dilaurate**
Acute oral toxicity: LD50 = 175 mg/kg (Rat)
LD50 = 210 mg/kg (Mouse)
Acute dermal toxicity: LD50 = 180 mg/kg (Mouse) Intraperitoneal
Eye Irritation: Moderately irritating (Rabbit)
Skin Irritation: Severely irritating (Rabbit)

**Section 12: Ecological Information**

**Ecological Data for ADDOCAT 201 40P**
Ecological Note: No data available for this product.

**Ecological Data for Dibutyltin Dilaurate**
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. If incinerated, toxic and corrosive combustion gases must be properly handled.

Empty Container Precautions: Empty container retains product residue and can be hazardous. Label precautions also apply to this container when empty. Recondition or dispose of empty container in accordance with government regulations.

Section 14: Transportation Information

Technical shipping name: Catalyst containing Dibutyltin Dilaurate

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: Organotin Compounds, Liquid, N.O.S.
- Hazard Class or Division: 6.1
- UN/NA Number: UN2788
- Packing Group: III
- Hazard Label(s): Toxic
- Hazard Placard(s): Toxic

Marine Transportation (IMO / IMDG)
- Proper Shipping Name: Organotin Compounds, Liquid, N.O.S.
- Hazard Class Division: 6.1
- UN Number: UN2788
- Packaging Group: III
- Hazard Label(s): Toxic
- Hazard Placard(s): Toxic

Air Transportation (ICAO / IATA)
- Proper Shipping Name: Organotin Compounds, Liquid, N.O.S.
- Hazard Class Division: 6.1
- UN Number: UN2788
- Packing Group: III
- Hazard Label(s): Toxic
- Radioactive?: Non-Radioactive
- Passenger Air - Max. Qty.: 60 L
- Passenger Packing Instruction: 611
- Cargo Air - Max. Qty.: 220 L
- Cargo Air Packing: 618
- Instruction:
## Section 15: Regulatory Information

### United States Federal Regulations

OSHA Hazcom Standard Rating:

- Hazardous

TSCA Inventory List:

- On TSCA Inventory

CERCLA Hazardous Substance:

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### SARA Title III

SARA Section 302 Extremely Hazardous Substances:

<table>
<thead>
<tr>
<th>Component(s)/CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### SARA Section 311/312 Hazard Categories:

Immediate Health Hazard

### SARA Section 313 Toxic Chemicals:

<table>
<thead>
<tr>
<th>Component(s)/CAS Number</th>
<th>Reporting Threshold</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>State Code</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutyltin Dilaurate</td>
<td>PA-N, NJ-N</td>
<td></td>
</tr>
<tr>
<td>77-58-7</td>
<td></td>
<td>0% 100%</td>
</tr>
</tbody>
</table>

#### State Code Translation Table

PA-N = Pennsylvania Non-hazardous
NJ-N = New Jersey Other - includes predominant ingredients

### 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

HMIS Rating

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</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: 000000000872
Version Date: 06/28/2006
MSDS Version: 2.0

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Indicates Relevant Change Made.