

HB Chemical Corp.

MATERIAL SAFETY DATA SHEET

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| MSDS #: 1098 | Issue Date: November 4, 2006 | Revision #: 1 | Revision Date: November 4, 2006 |
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1. Product & Company Information

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|-----------------------------------|---|---|--|
| Trade name: CTB(CTP)-50 | Chemical Description: A specified blend of N-(cyclohexylthio) phthalimide in bead form. | Address: HB Chemical 140 Ascot Ln. Cuyahoga Falls, Ohio 44685 330-920-8023 - tel | Emergency Contact: <i>Chemtrec:</i> 1-800-424-9300 (in US) 1-703-527-3887 (Non-US) |
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2. Hazard Summary & Hazardous Ingredients

Physical Hazards (None if Blank): Dust explosion hazards are known to exist for some powder raw materials. The bead form minimizes the generation of dust.

Health Hazards (None if Blank):

Inhalation of odor after skin contact may cause nausea.

May be harmful if swallowed.

Eye, skin, respiratory irritant

HMIS Ratings: Hazard Rating Scale: 0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe

| | | | |
|---------------|---------------------|------------------------|------------|
| Health | Flammability | Physical Hazard | PPE |
| 2 * | 1 | 0 | B |

An asterisk in the HMIS Health code indicates a chronic health hazard. See section 3. The PPE recommendation is based on the PPE for the individual raw materials contained in this blend. It is our recommendation that PPE defined above be used when handling this product according to Section 8 of this MSDS. Individual plant environmental and handling conditions may vary; plant safety personnel should determine PPE specific to actual plant conditions.

Exposure Limits (None if Blank):

| <u>Chemical Name:</u> | <u>CAS No.:</u> | <u>ACGIH:</u> | <u>OSHA:</u> |
|-----------------------|-----------------|---|--------------|
| Binder Component | 112926-00-8 | 6 mg/m3 TWA 3000 mg/m3 IDLH | 6 mg/m3 TWA |
| Oil mist | 64742-52-5 | 5 mg/m3 TWA 10 mg/m3 STEL 2500 mg/m3 IDLH | 5 mg.m3 TWA |

3. Health and Toxicology Information

Acute Overexposure (None if Blank):

Irritation:

| | | |
|------------|-------------|-------------------|
| Eye | Skin | Irritation |
| x | x | x |

Desiccant - will dry out skin and mucous membranes.

Chronic Overexposure (None if Blank):

| | |
|---------------------------|----------------------------------|
| Skin Sensitization | Respiratory Sensitization |
| x | |

Repeated skin contact may cause dermatitis. **Primary Routes(s) of Entry:** Eyes, Skin, Inhalation

Medical Condition(s) Prone to Aggravation: Eye, skin, respiratory tract ailments.

Toxicity Information (None if Blank): LD50 (oral, rat) in mg/kg: 2600

Carcinogenic Information (None if Blank):

4. First Aid

Eye: Rinse with plenty of water. Seek medical attention if irritation persists.

Skin: Wash off immediately with plenty of soap and water. Seek medical advice in case of irritation.

Ingestion: Seek medical attention.

If conscious give 2-3 glasses of water. Do not induce vomiting.

Inhalation: Remove to fresh air. Seek medical advice if irritation persists.

5. Fire-Fighting Measures

Extinguishing Media:

Dry chemical, carbon dioxide, water fog and foam.

Unusual Fire and Explosion Hazards (None if Blank):

Fire Fighting Protective Equipment:

A self contained breathing apparatus (SCBA) in positive pressure mode and full fire fighting protective gear should be worn for fighting fires.

Special Fire-Fighting Procedures (None if Blank):

Flash Point based on the lowest known value of the components of this blend: 180 C

6. Accidental Release Measures

Spill Clean-up: Sweep up by mechanical means. Avoid dust formation.

Shut off ignition source.

Waste Disposal: Put into proper containers and dispose of in accordance with all local, state and federal regulations.

7. Handling and Storage

Storage Conditions: Store in a cool, dry environment in original sealed packaging. Avoid exposure to direct sunlight. Avoid flames, sparks, hot surfaces, static charges and other sources of ignition.

Store away from acids and oxidizers: x

Store away from high temperatures:

Store below 120°C.

Store away from humidity and direct sunlight. **Handling:** Persons handling equipment should wear protective equipment specified in Section 8. Good housekeeping and hygienic practices should be observed.

8. Exposure Controls and Personal Protection

Eye:

Safety goggles

Gloves:

Rubber or plastic gloves.

Respiratory:

Dust mask.

Clothing:

Long sleeved shirt and long pants.

Special Plant Equipment: Local exhaust ventilation, eye bath, safety shower.

Hygienic Practices: Wash after handling product. After work cloths be changed and washed before reuse. Do not smoke, eat or use alcohol while handling product.

The bead form of this product minimizes dust exposure and the associated hazards.

9. Physical and Chemical Properties

Physical State

Bead

Color

Beige

Odor

Characteristic

Specific Gravity

1.46

Melt Point (lowest known)

60°C

H₂O Solubility

Insoluble

10. Stability and Reactivity

Stability & Polymerization: Stable. Hazardous polymerization will not occur.

Slowly degrades at temperatures above 156 C. Hazardous polymerization will not occur.

Incompatibility:

Strong Oxidizers: x

Strong Acids: x

Avoid sources of ignition.

High temperatures (>800 C) treatment (calcining) which will change toxicological properties.

Storage at elevated temperatures and humidity.

Hazardous Decomposition Products:

Carbon Oxides: x

Nitrogen Oxides: x

Sulfur Oxides: x

Other Hazardous Decomposition Products (None if Blank):

Smoke, fumes and unburned hydrocarbons and trace oxides.

Special Sensitivity (None if Blank):

11. Ecological Information

Clean Water & Air Regulations (None if Blank):

KEY: CW-A) Clean Water Act Hazardous Substances, 40 CFR 116.4, 117.3, CW-B) Clean Water Act Priority Pollutants, 40 CFR Sec. 40, CW-C) Clean Water Act Toxic Pollutants, 40 CFR 401.115 (F19), CA-A) Clean Air Act Hazardous Air Pollutants, 40 CFR Part 61, CA-B) Clean Air Act High-Risk Pollutants, 40 CFR Sec. 63.74, CA-C) Clean Air Act ARP Toxic Substances, 40 CFR Sec. 68.130.

12. Disposal Information

Disposal Method: Dispose of product or empty containers in accordance with local, state and federal regulations.

Hazardous Waste Regulations (None if Blank):

KEY: HZ-A) RCRA Acute Hazardous Wastes (P-List), 40 CFR Sec. 261.3, HZ-B) RCRA Characteristic Toxic Wastes (D-List), 40 CFR Sec. 261.24, HZ-C) RCRA Toxic Hazardous Wastes (U-list), 40 CFR Sec. 261.33, HZ-D) RCRA Appendix VII F/K List Hazardous Constituents, 40 CFR Part 261 App. VII, HZ-E) RCRA Appendix VIII Hazardous Constituents, 40 CFR Part 261 App VIII.

Superfund Reportable Quantity Chemicals, 40 CFR Sec. 302.4 (F12) (None if Blank):

13. Transportation Information

Ground DOT/TDG (None if Blank):

Air IATA (None if Blank):

Aviation Regulated Solid, N.O.S. [N-(cyclohexylthio) phthalimide], Class 9, UN3335

14. Regulatory Information

Inventory Status (None if Blank):

US TSCA:

All ingredients listed.

Canadian DSL/NDSL:

All ingredients listed.

SARA Title III:

KEY: S-A) SARA Title III Sec. 302 Extremely Hazardous Substances, 40 CFR Part 355, S-B) SARA Title III Sec. 313 Toxic Chemicals, 40 CFR Sec. 37, S-C) SARA Title III Sec. 313 Chemicals of Special Concern, 40 CFR Sec. 373.28:

SARA Title III, Section 313 (also known as the Emergency Planning and Community Right to Know Act, or EPCRA) requires certain suppliers of mixtures or trade name products to notify their customers when such mixtures or trade name products contain chemicals listed in Section 313. Listed below are Section 313 chemicals contained in this product (none if blank):

| <i>Chemical</i> | <i>CAS Number</i> | <i>Amount</i> |
|-----------------|-------------------|---------------|
|-----------------|-------------------|---------------|

TSCA Preliminary Assessment Information Reporting, 40 CFR Sec. 712 (None if Blank):

State Regulations (None if Blank):

Oil mist Ca MA Nb Pa Ta

KEY: **CA:** Ca) Director's List of Hazardous Substances, Cb) OSHA Workplace Airborne Contaminants, Cc) OSHA workplace Carcinogens, Cd) HWCL Extremely Hazardous Wastes, Ce) HWCL Hazardous Wastes, Cf) State Superfund Hazardous Substance, Cg) ARP Regulated Substance, Ch) Proposition 65 Carcinogens, Ci) Proposition 65 Reproductive Toxins, Cj) Air Toxics Requiring Quantification, Ck) CA Air Toxics Requiring Notification, **FL:** FL) Toxic Substances in the Workplace, **IL:** Ia) EPA (Water Sections) Priority Pollutants, Ib) EPA (Water Sections) Toxic Pollutants, Ic) Hazardous Waste, **MA:** MA) Substance List, **MI:** MI) Critical Materials Register, **NJ:** Na) Right-to-Know Hazardous Substances, Nb) Workplace Hazardous Substances, **NY:** NY) Hazardous Substance Bulk storage List, **OH:** Oa) Emergency Response Law Toxic Chemicals, Ob) Hazardous Wastes, **PA:** Pa) Hazardous Substances List, **TX:** Ta) Air Contaminants with Health Effects Screening Levels, Tb) Hazardous Wastes List.

IMDS Listing (None if Blank):

| <i>Substance</i> | <i>CAS#</i> | <i>Class</i> | <i>Total Percent</i> |
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15. Other Information

Abbreviations:

ND ó Not Determined, NE ó Not Established, PPE ó Personal Protective Equipment

References: Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 2000, NIOSH Pocket Guide to Chemical Hazards, June 1997, HMIS Implementation Manual, 2nd Edition, ChemCheck Handbook, Specialty Technical Publishers, IARC WEB site, NTP WEB site

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