



Material Safety Data Sheet

Product Name: CBS (CZ)

Effective Date: January 1, 2007

● CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CBS(CZ)

Chemical Name: N-Cyclohexyl-2-Benzothiazole Sulfenamide

Uses: Accelerator

Manufactured by: Northeast Auxiliary Chemical Industry Co.,Ltd

Wuqiang Industry Park

Hebei, China

Tel: +86-318-3791833

Fax:+86-318-3835598

Http://www.dongzhuhg.com

● COMPOSITION/INFORMATION ON INGREDIENTS

N-Cyclohexyl-2-Benzothiazolesulfenamide 95—99%

CAS # 95-33-0

Heating Loss % Max. 0.4

Ashes % Max. 0.3

● HAZARD IDENTIFICATION

Hazard information

Emergency Overview: Combustible dust-explosion potential. Keep away from Heat, Sparks, and flame. This material is irritation to skin, eyes and respiratory tract.

Eye Contact: Cause eye irritation. Moderate Eye Irritation: Signs/symptoms can include redness, swelling. Pain, tearing, and hazy vision.

Skin Contact: May cause an allergic skin reaction. May cause a rash and itching of the skin. May cause skin defatting with prolonged exposure.

Inhalation: Causes moderate respiratory irritation. Irritating vapor causes immediate distress. Irritates mucous membranes. Irritation (upper respiratory); Sign/symptoms can include soreness of the nose and throat, coughing and sneezing.



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Ingestion: May be harmful if large amounts are swallows. May cause liver and kidney damage

● First Aid Information

Skin: Remove contaminated clothing and wash before re-use. Immediately wash contaminated skin with running water.

On Skin: Remove contaminated clothing. Wash skin with water, using soap if available. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.

Inhaled: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Swallow: Immediately rinse mouth with water, Give warm water to drink. Induce vomiting. Seek immediate medical assistance

Notes to Physician: Provide symptomatic/supportive care as necessary. Treatment based on sound judgment of physician and individual reactions of patient. Observe for signs of respiratory distress.

● FIRE FIGHTING MEASURES

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| Flash Point (F/C) | 350F/177C |
| Autoignition Temp. (F/C): | 660F/348C |
| Lower Explosion Limit in Air(LEL) | Not Determined |
| Upper Explosion Limit in Air (UEL) | Not Determined |
| Extinguishing Media: | Water fog, carbon dioxide, foam, dry chemical |
| Special Exposure Hazards | Fight fire from a safe distance and from a protected location. Flammable dust when in finely divided and highly suspended state. Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not allow runoff to enter waterways. |
| Special Protective Equipment: | Fire fighters should wear full protective clothing, including self-contained breathing equipment |
| Unusual Fire/Explosion Hazards: | Toxic emissions may result if product is involved in a fire. Fire produces highly toxic sulfur dioxide gas |

● ACCIDENTAL RELEASE MEASURES

Spill Prodecures: Wear protective equipment specified. Avoid the generation

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of dust. Sweep, vacuum, or shovel and place into closable container for disposal.

Procedure for Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Scoop up and remove. Do NOT spread spilled product with water.

Cleaning/Absorption:

● Handling and Storage

Handling: Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material. Avoid generating or breathing dust. Avoid contact with eyes, skin and clothing. Reclose containers of unused product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not reuse this container.

Storage: Store closed containers in a cool, dry, well-ventilated area. Store away from strong oxidizing materials. Avoid exposure to direct sunlight. Do not near Crystex insoluble Sulfur. Slowly degrades and releases irritating vapors under warm, humid conditions.

● EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety glasses or goggles to protect against exposure. Eye protection is not required during typical product use conditions

Skin Protection: Normal work coveralls. Launder contaminated clothing before reuse.

Gloves: Use gloves as a standard industrial handling procedure. All cleanable impervious glove types are acceptable.

Respiratory Protection: Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. Firefighting; Use a positive pressure demand full face self contained breathing apparatus.

Ventilation: General; Local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product. Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with the applicable air pollutions control regulations. Eliminate ignition sources.



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Airborne Exposure Limits: Nuisance Dust. OSHA PEL/8hr-TWA=15mg/m³ (Total Dust). OSHA PEL/8-Hr TWA=05mg/m³ (Respirable Dust).AGGIH TLV/8-Hr TWA =10mg/m³. Cyclohexylamine:AGGIH TLV/8Hr TWA=10 ppm. NIOSH REL/8Hr TWA =10 ppm.

● PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-White powder White to off-white powder
Odor: Little bitter
Ph: N/A
Specific Gravity: 1.31-1.34
Density: Unknown
Bulk Density: 1280 Kg/m³
Melting Point (F/C): 97—105 C
Boiling Point (F/C): Not Determined
Vapor Pressure: Negligible
Vapor Density (Air=1): Not Determined
% Volatile by Volume: < 0.5%
Solubility in Water: INSOLUBLE
Other Solubility: Soluble in Benzene, Ethyl Acetate, Acetone, Carbon Tetrachloride.
Little soluble in ethanol and gasoline.
Viscosity: Not Determined
Other Data: Ash Content = 0.4 % max.
Molecular Weight: 264.4
Molecular Formula: C₁₃-H₁₆-S₂-N₂

● STABILITY AND REACTIVITY

Chemical Stability: Stable when stored at room temperature in closed, Original container. Stable under normal conditions of handling, use and transportation. Stable if protected from heat and exposure to air. Loses potency with Protect from moisture.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Keep away from heat, sparks and flame.
Materials to Avoid: Reducing agents. Contact with acids. Avoid contamination of product with small amounts of water. Do not store near



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Genotoxicity: None.
Reproductive/Developmental: No evidence of teratogenicity in animal studies using rats, mice and hamsters
Toxicity:

● ECOLOGICAL INFORMATION

Acute Fish Toxicity: 96Hr LC50 Rainbow Trout = 5.4mg/l. 96Hr LC50 Bluegill Sunfish = 7.9 mg/l. 96Hr LC50 Fathead Minnow => 1000 mg/l/
Acute Crustaceans Toxicity: 48Hr LC50 Daphnia Magna =18.0 mg/l.
Acute Algae Toxicity: 96Hr EC50 Algae (Chlorophyll)=1.1 ppm. 96Hr EC50 Algae (cell count)=0.9ppm.
Octanol /Water Coefficient: 4.93 log P
Chemical Fate Information: Biodegradability:4% CO2 evolution
Other Information: Not Available

● DISPOSAL CONSIDERATIONS

Disposal of Waste Method:
This material is not a RCRA hazardous waste. Bury in a licensed landfill or burn in an approved incinerator according to federal, state, and local regulations. Empty containers should be handled in a manner not to cause dusting during collection, Transportation and disposal.
Contaminated Packaging:
If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Dispose of container according to national or local regulations.

● TRANSPORT INFORMATION

DOT :DOT Status: Not Regulated
DOT Shipping Name: NONE
DOT Reportable Quantity (lbs): None
ICAL/IATA: Status: NOT REGULATED FOR TRANSPORTATION
Proper Shipping Name: None
UN/NA Number: NONE
IMDG: Status: Not Regulated
Proper Shipping Name: None
TDG (Canada): Status: Not Regulated



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● REGULATORY INFORMATION

Worldwide Inventory Status

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|--|--------|
| TSCA (USA): | Listed |
| Canadian DSL: | Listed |
| Canadian NDSL: | N/A |
| EINECS/ELINCS (Europe): | Listed |
| Japanese Inventory (ENCS): | Listed |
| Korean Chemical Inventory (ECL): | Listed |
| Australian Chemical Inventories: (AICS) | Listed |
| New Zealand (NZ): | Listed |
| Phillipines (PICCS) Inventory: | Listed |
| China (CLECS): | Listed |

US Regulatory Rules

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| SARA Section 302 | None Found |
| SARA 311/312 Hazard Categories: | Immediate Delayed Fire |
| SARA 313 Chemical: | 2-Mercaptobenzothiazole |
| RCRA Status: | Not a RCRA waste |
| Other Regulations: | |
| California Proposition 65: | NONE |
| New Jersey Right-to-Know List: | N/A |
| Pennsylvania Right to Know List: | N/A |
| Florida Right to Know: | N/A |
| Minnesota Right to Know: | N/A |
| MA Right to Know: | N/A |
| FDA Status 21 CFR: | Regulated for use under the following sections of 21CFR: 177.2600 Rubber Articles Intended for Repeated Use in Food Contact. |

Canadian Regulations

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| WHMIS Hazard Class: | D2B TOXIC MATERIALS/ Materials Causing Other Toxic Effects |
| NPRI: | N/A |