HB Chemical Corporation

MSDS

SECTION I CHEMICAL and COMPANY IDENTIFICATION

PRODUCT: ***CBS (CBS powder)***
CHEMICAL NAME: N-cyclohexyl-2-benzothiazolesulfenamide
COMMON/GENERIC NAME: **CBS – rubber accelerator C13H16N2S2**
CHEMICAL FAMILY: **Accelerator**
Distributor: **HB Chemical Corp. - Customer Service 330-920-8023**
EMERGENCY NUMBERS: ***CHEMTREC 800-424-9300***
CANUTEC(Canada) 613-996-6666

SECTION II COMPOSITION / INGREDIENT INFORMATION

		OSHA PEL	ACGIH TLV
COMPOSITION:	**(N-cyclohexyl-2-benzothiazolesulfenamide**	None	None
	C.A.S.# 95-33-0	established	established

SECTION III/IV HAZARDS / FIRST AID PROCEDURES

EMERGENCY OVERVIEW: A white pellet or powder. which may cause allergic skin and respiratory reactions. May eye and skin irritation. Not known as an acute health Hazard. May react with nitrosating agents to form nitrosamines (potential cancer causing) Dust may present ignition source for explosion.
EYE: Flush eyes with water for 15 min. Call a physician if irritation develops**.**
SKIN: Prolonged or repeated skin contact may cause irritation. Remove contaminated clothing and wash skin with soap and water. If in contact with hot product, treat as a burn**.**
INGESTION: Do not induce vomiting. Give 2 glasses of water (never give anything to a unconscious person. Call a physician. If victim does vomit keep head below waist to prevent vomit from entering the lungs.
INHALATION: Can be irritating to the eyes, nose and respiratory tract following prolonged exposure. Remove to fresh air; give artificial respiration or oxygen if necessary.
TOXICITY: No significant adverse effects expected. Not considered toxic/hazardous.
CARCINOGENICITY: Not listed by NTP, IARC or OSHA

IN ALL CASES OF EMERGENCY, CONTACT A PHYSICIAN

SECTION V FIRE AND EXPLOSION INFORMATION

FLASH POINT 177°C COC
Auto Ignition Temperature 339 C or 642 F
FIRE-FIGHTING PROCEDURES: Use Chemical foam, CO_2, Dry Chemical, water fog.
HAZARDOUS COMBUSTION PRODUCTS: This product will decompose under extreme temperatures forming oxides of carbon as well as Aromatic hydrocarbons and nitrogen oxides. Sulfur Oxides ay also be present
PROTECTIVE EQUIPMENT: Full eye protection and protective clothing are required for all

indoor/outdoor fires and spills.

Explosion Hazards: Dust suspended in air in critical proportions with a presence of an ignition source presents an explosion hazard. The following is critical in TMQ powder and dust particles:

Min. explosion concentration: 0.035 oz/cu ft
Min. ignition energy: 0.25 joules
Maximum rate of pressure rise: 1200 psi/sec. At 1oz cu ft
Max. Pressure of explosion: 76 psig at 0.5 oz/cu ft.
Explosion severity: 3.8 (severe)
Volume resistivity: 1.30 x10+15 ohm-cm
NFPA standard 497M rating (1986 edition): class II, Group G
(the above was obtained from RT Vanderbilt MSDS code 045551)

SECTION VI SPILLS AND ENVIRONMENTAL INFORMATION

SPILL OR LEAK PRECAUTIONS: Wear appropriate protective clothing, gloves and equipment. Eliminate all sources of ignition. Contain spill . Transfer to secure containers and dispose of according to local and state regulations. Thought should always be given to collecting the material in such a manner that it could be recycled. Clean/scrub affected area with detergent. Prevent run-off into sewers or natural waterways. Spills in excess of the RQ must be reported to the local emergency response organizations. Major spills should also be reported to the National Response Center. Spills with potential to contaminate coastal waterways must be reported to the U.S. Coast Guard (800-424-8802)
WASTE DISPOSAL: All containers should be effectively labeled to facilitate the appropriate disposal or reclaim.

SECTION VII HANDLING AND STORAGE

Store in sealed containers in dry, ambient temperature conditions (less than 110°F). Perform drum and tote filling in well-ventilated area wearing protective eye shields and clothing.

SECTION VIII EXPOSURE CONTROLS AND PERSONAL PROTECTION

VENTILATION: Use only where sufficient ventilation exists to keep exposure levels of fumes and dust below recommended levels.
RESPIRATORY AND PERSONAL PROTECTION: Respirators should be selected when TWA exceeded. Safety glasses with side shields; gloves, boots and apron as appropriate.
FACILITIES: Consideration to properly engineered explosion suppression should be considered when large amounts of product are handled. There should be a shower facility and eyewash in the building where this product is being stored and handled. Exercise good chemical handling practice.

TVL/PEL: Not Available

SECTION IX PHYSICAL AND CHEMICAL INFORMATION

Appearance: white/tan prills/flake	Evaporation Rate: < 1 (butyl acetate=1)
Specific Gravity @25°C = 1.30	Melting Point: 100 C approx.
Vapor Pressure: ND	Refractive Index 25°C: ND
Viscosity cPs (25°C) = ND	Solubility in Water: Not soluble

SECTION X STABILITY AND REACTIVITY

Under normal storage conditions, this product a) is stable; b) will not polymerize or exotherm; c) should be kept away from extreme heat, strong oxidizers and bases; d) this product decomposes under high temperature and hydrolyses in humid conditions. Above 140 C material may become instable.

SECTION XI TOXICOLOGICAL INFORMATION

Routes of Entry: Eye, Inhalation and Ingestion and skin
Acute Oral (Rat) 5300 mg/kg (LD50)
Acute Dermal (Rabbit) >7940 mg/kg (LD50)

Mutagenic Effects: Non-mutagenic for mammalians
Carcinogenic effect: Not available

Remarks:

SECTION XII ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity in water (LC50): 5.4 mg/l (LC50), 96 hours trout. 7.9 mg/l (LC50), 96 hours bluegill. >1000mg/l (LC50), 96 hours (Fathead minnow), >18 mg/l (LC50), 48 hours (Daphnia) 1.1 mg/l (EC50) 96 hr, (algae, cell count)
BOD and COD: Not available

Biodegradability: Not available

Products of Biodegradation: No likely short term hazards of degradation however, potential long term may arise.

SECTION XIII DISPOSAL CONSIDERATIONS

Incineration by a permitted hazardous waste facility in accordance with all regulatory requirements is the preferred method of disposal. Empty containers can be rinsed with a suitable solvent/surfactant and steamed to remove residual product and fumes before disposal or reuse in accordance with applicable regulations. For spill clean-up procedures see Sect.VI.

SECTION XIV TRANSPORTATION INFORMATION

DOT: Not restricted. Label: Product trade name with chemical description.
CANADA TRANASPORT HAZ.GOODS: Not restricted.
AIR (IATA/ICAO)**:** Not restricted. Label: Product trade name with chemical description.
EUROPEAN TRANSPORTATION: ADR/RID HAZ. CLASS: Not regulated.
US CUSTOMS: - HARMONIZED TARIFF CODE:

SECTION XV REGULATORY INFORMATION

OSHA: Not Determined
SARA TITLE III: - 311/312 CATEGORIES: Hazard identification: N-cyclohexyl-2-benzothiazolesulfenamide: delayed health hazard

" " - 313 Reportable ingredients: None
CERCLA RQ: Not applicable.
RCRA Status:
TSCA REGULATORY: All intentional ingredients are listed in the TSCA Inventory. As N-cyclohexyl-2-benzothiazolesulfenamide
HCS (USA) Class – Irritating substance and sensitizing substance
CANADA WHMIS HAZARD SYMBOL AND CLASS: Not Regulated
CANADA INGREDIENT DISCLOSURE LIST: Does not contain any ingredients on the IDL. All intentional ingredients are on the DSL.
EINECS: 202-409-1

SECTION XVI OTHER INFORMATION

HMIS Label: Health: 2
Fire: 1
Reactivity: 0
Protection: E

Prepared: MAY, 2009

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other or additional considerations.

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