



Safety Data Sheet (SDS)

Revision 1 Review Date: 2/4/16

1. Chemical Product and Company Identification

Product Name:	CBS N-cyclohexylbenzothiazole-2-sulphenamide
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
MSDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	
Molecular Formula:	Not Applicable
Molecular Weight via GPC, Mn:	N/A
CAS#	95-33-0
OSHA Status	Not Hazardous

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

GHS Classification

Physical hazards: Not Classified

Health hazard: Skin sensitization Category 1B

Environmental hazards: Not Classified

GHS label elements:

Hazard Pictograms



Signal word: Warning

Hazard statement: May cause an allergic skin reaction

Precautionary statement

Prevention Avoid breathing dust/fume/gas/mist/vapours/ spray.
Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves

Response: If on skin: wash with plenty of water. If skin irritation or rash occurs : get medical advise/attention. Wash contaminated clothing before reuse.

3. Composition / Information on Ingredients

Chemical Name	CAS Number	EC No.	Concentration
N-(1,3-dimethylbutyl)-n-phenyl-p-phenylenediamine	95-33-0	202-411-2	<u>>96%</u>

<4% percent of the mixture consists of component of unknown toxicity.

4. First Aid Measures

<u>Inhalation:</u>	If symptoms develop, move victim away from exposure and into fresh air. Administer oxygen if breathing is difficult.
<u>Eyes:</u>	Flush eyes with copious quantities of water while holding eyelids open. If symptoms persist or if there is any visual difficulty, consult physician.
<u>Skin:</u>	Remove contaminated clothing and launder it before reuse. Wash exposed area with soap and water. If irritation persists, consult a physician.
<u>Ingestion:</u>	Do not induce vomiting. Rinse mouth. Give water to drink. Seek medical attention. If individual is drowsy, do not give anything by mouth.
<u>Information to physician:</u>	Symptoms: Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Hazards: Repeated contact may cause skin sensitization. Treatment: See Section 8 for information on exposures measures.

5. Fire-Fighting Measures

<u>Suitable Extinguishing Media:</u>	Water Spray, water mist, Dry Chemical, Carbon Dioxide CO ₂ , appropriate foam.
<u>Unsuitable extinguishing media:</u>	Water jet.
<u>Special Fire Fighting Procedures:</u>	Do not enter confined fire space without proper protective equipment, including a NIOSH approved SCBA. Wear self-contained breathing apparatus and protective gloves.
<u>Hazardous Combustion Products:</u>	Emits toxic fumes under fire conditions: Carbon monoxide (CO), Sulfur Oxides (Sox), nitrous gases (NO _x).

6. Accidental Release Measures

<u>Steps to be taken in case material is Spilled:</u>	Remove ignition sources. Provide adequate ventilation. Avoid inhalation of vapors or dust. Avoid skin and eye contact.
<u>Environmental Disposal Information:</u>	Avoid disposing into drainage/sewer system or directly into the aquatic environment.

Waste Disposal:

Pick up and arrange disposal without crating dust. Keep in suitable, closed containers for disposal. Clean up affected area. Reclaim or dispose of in accordance with local, state, and federal regulations.

7. Handling and Storage:

Handling:

Avoid contact with skin and eyes. Avoid dust generation. Take Precautionary measures against static discharges.

Storage:

Store in a cool, dry, ventilated area. Keep containers away from sources of ignition- No smoking. Keep container tightly closed. store separately from oxidizing agents.

8. Exposure Controls / Personal Protection

Control parameters:

Occupational Exposure Limits (OEL)

Ingredient Data:

Not Available.

Emergency Limits:

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
CBS	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
N-cyclohexyl-2-benzothiazolesulfenamide	Not available	Not available

Exposure controls:

Ensure good ventilation and local exhaustion of the work area. Avoid dust generation.

Respiratory Protection:

Avoid breathing dust. In case of insufficient ventilation, wear Suitable respiratory equipment.

Ventilation:

Provide explosion proof ventilation as required to control vapor levels. Ventilation rates should be based upon usage conditions.

Protective Gloves:

Wear appropriate gloves to prevent skin exposure.

Eye Protection:

Wear safety glasses or chemical goggles to prevent eye contact.

Skin and Body Protection:

Wear suitable protective clothing to prevent skin exposure.

Environmental Exposure Controls:

Avoid discharge into the environment. This material and its container must be disposed of as hazardous waste. According to local regulations, Federal and official regulations.

9. Physical and Chemical Properties

<u>Physical state</u>	Solid
<u>Form</u>	Powder or granule
<u>Color</u>	White or grayish white
<u>Odor</u>	Slightly amine like
<u>Odor threshold</u>	Not available
<u>pH</u>	Not available
<u>Vapor pressure</u>	< 0.000000453 hPa (25°C)
<u>Vapor density</u>	Not available
<u>Boiling point</u>	Not available
<u>Melting point/Freezing point</u>	94 -102 °C
<u>Solubility (water)</u>	0.32 mg/l (21°C)(PH=7)
<u>Partition coefficient</u>	log Pow: 5(25°C)
<u>Specific gravity</u>	Not available
<u>Bulk density:</u>	Not available
<u>Relative density</u>	1.29(20°C)
<u>Density</u>	Not available
<u>Flash point</u>	Not available
<u>Flammability limits in air, upper, %by volume</u>	Not available
<u>Flammability limits in air, lower, % by volume</u>	Not available
<u>Auto-ignition temperature</u>	Not available
<u>VOC</u>	Not available
<u>Percent volatile</u>	Not available
<u>Other data</u>	
Viscosity	Not available
Decomposition temperature:	145 °C
Flammability (solid, gas) :	Not a readily combustible solid

10. Stability and Reactivity

<u>Stability:</u>	Material is stable under normal conditions.
<u>Incompatibility (Materials to Avoid):</u>	Oxidizing agents..
<u>Conditions to Avoid:</u>	Heating>100 °C: May catch fire.
<u>Hazardous decomposition products:</u>	Thermal decomposition products: Carbon monoxide (CO), nitrous gases (NOx), Sulfur oxides (Sox).

11. Toxicological Information

<u>Toxicokinetics, metabolism and distribution:</u>	
<u>Non-human toxicological data:</u>	Not available
<u>Information on toxicological effects:</u>	
<u>Acute toxicity:</u>	
<u>LD50(Oral, Rat):</u>	5300 mg/kg bw

<u>LD50(Dermal, Rabbit):</u>	> 7940 mg/kg bw
<u>LC50(Inhalation, Rat):</u>	Not available
<u>Skin corrosion/Irritation:</u>	Not classified
<u>Serious eye damage/irritation:</u>	Not classified
<u>Respiratory or skin sensitization:</u>	May cause an allergic skin reaction.
<u>Germ cell mutagenicity:</u>	Not classified
<u>Carcinogenicity:</u>	Not classified
<u>Reproductive toxicity:</u>	Not classified.
<u>STOT- single exposure:</u>	Not classified
<u>STOT-repeated exposure:</u>	Not classified
<u>Aspiration hazard:</u>	Not classified

12. Ecological Information

Toxicity

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

<u>Persistence and degradability:</u>	Not inherently biodegradable
<u>Bioaccumulative potential:</u>	BCF: 924.7 L/kg
<u>Mobility in soil:</u>	Not available.
<u>Results of PBT&vPvB assessment:</u>	The substance is not PBT / vPvB.
<u>Other adverse effects:</u>	No known significant effects or critical hazards.

13. Disposal Considerations

<u>Disposal methods of the substance/Mixture:</u>	Avoid discharge into the environment. This material and its Container must be disposed of as hazardous waste. According To local regulations, Federal and official regulations.
<u>Disposal methods of the Contaminated Packaging:</u>	Disposal must be made according to official regulations as the methods of substance/mixture.

14. Transport Information

D.O.T. Shipping Name

Not Regulated

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

**N-cyclohexyl-2-benzothiazolesulfenamide(95-33-0)
is found on the following regulatory lists**

"US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory"

16. Other Information

HMIS® ratings Health: 1

Flammability: 1

Physical hazard: 0

NFPA ratings Health: 1

Flammability: 1

Instability: 0

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.