

Sunsine CBS

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Shandong Sunsine Chemical Co., Ltd. Shanxian City Shandong Province, China	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Sunsine CBS Granule	Synonyms: N-cyclohexyl-2-benzothiazylsulfenamide, 2-Benzothiazolesulfenamide, N-cyclohexyl, CBS
Chemical Name: N-cyclohexyl-2-benzothiazolesulfenamide	CAS Number: 95-33-0
EC Number: 202-411-2	Index Number: 613-136-00-6
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Chemicals for synthesis.
Issued By: Sovereign Chemical Company	Date of Issue: November 1, 2018

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400, H410.



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
 Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant
 R36/37/38: Irritating to eyes and skin.



Xi; Sensitizing
 R43: May cause sensitization by skin contact.



N; Dangerous for the environment
 R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

Information concerning particular hazards for human and environment: Not applicable.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms



GHS07



GHS09

Signal word Warning

Hazard-determining components of labeling

N-cyclohexylbenzothiazole-2-sulphenamide

Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves and eye protection.

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P391 Collect spillage.

Hazard description

WHMIS-symbols



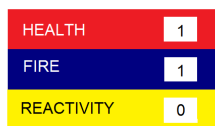
D2B – Toxic material causing other toxic effects

NFPA ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

HMIS ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

HMIS Long Term Health Hazard Substances: Substance is not listed.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS No. Description: 95-33-0 N-cyclohexylbenzothiazole-2-sulphenamide

Identification number(s)

EC number: 202-411-2

Index number: 613-136-00-6

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Asthma attacks

Allergic reactions

Gastric or intestinal disorders

Headache

Dizziness

Hazards: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

In cases of irritation to the lungs, initial treatment with corticoid steroid inhalants.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

Medical supervision for at least 48 hours.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: Cool endangered receptacles with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers, surface or ground water.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

No special precautions are necessary if used correctly.

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles

Avoid storage near extreme heat, ignition sources or open flame.

Store in a cool location.

Information about storage in one common storage facility

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions

Store in cool, dry conditions in well-sealed receptacles.

Store receptacle in a well-ventilated area.

Keep container tightly sealed.

7.3 Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

DNELs No further relevant information available.

PNECs No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection

Use suitable respiratory protective device when high concentrations are present.

Use suitable respiratory protective device in case of insufficient ventilation.

For spills, respiratory protection may be advisable.

Protection of hands



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

No further relevant information available.

Risk management measures

See Section 7 for additional information.

No further relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information

Appearance Form: Granule Color: Off White	Change in Condition Melt Point/Range: 96°C minimum Boiling point/Range: Undetermined
Odor: Characteristic	Octanol/Water Partition Coefficient: log Pow = 3.55
Odor threshold: Not determined	
pH: NA	Specific Gravity: 1.27 – 1.30
Vapor Pressure: NA	Flash point: 347 F °/ 175 °C
Density at 20 °C: 1,28 g/cm ³	Flammability (solid, gaseous): Product is not flammable
Relative density Not determined.	Ignition temperature: Not determined
Vapor Density (Air = 1): NA	Decomposition temperature: Not determined
Evaporation rate Not applicable.	Self-igniting: Not determined.
Solubility in / Miscibility with water: Insoluble.	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable. Kinematic: Not applicable.	Explosion limits Lower: Not determined. Upper: Not determined.

9.2 Other information No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with alkali, amines and strong acids.

Reacts with oxidizing agents.

Reacts with reducing agents.

Toxic fumes may be released if heated above the decomposition point.

10.4 Conditions to avoid: Store away from oxidizing agents.

10.5 Incompatible materials: Contact with acids liberates toxic gases.

10.6 Hazardous decomposition products

Nitrogen oxides

Carbon monoxide and carbon dioxide

Sulphur oxides (SO_x)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Primary irritant effect

on the skin: Slight irritant effect on skin and mucous membranes.

on the eye: Slight irritant effect on eyes.

Sensitization

Sensitization possible through skin contact.

Sensitizing effect through inhalation is possible by prolonged exposure.

Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU

Classification

Guidelines for Preparations as issued in the latest version:

Irritant

Toxic and/or corrosive effects may be delayed up to 48 hours.

Danger through skin adsorption.

Sensitization: Sensitization possible by inhalation and/or dermal contact.

Repeated dose toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: Toxic for aquatic organisms

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects

Remark: Very toxic for fish

Additional ecological information

General notes

The declarations are valid for the component with the highest toxicological risk.

Avoid transfer into the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment cannot be excluded.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also, poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORTATION INFORMATION

14.1 UN-Number

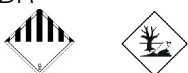
DOT	N/A
ADR, IMDG, IATA	UN3077

14.2 UN proper shipping name

DOT	N/A
ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N -cyclohexylbenzothiazole-2-sulphenamide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N-cyclohexylbenzothiazole-2-sulphenamide), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N-cyclohexylbenzothiazole-2-sulphenamide)

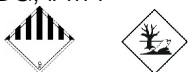
14.3 Transport hazard class(es)

DOT	
Class	N/A
ADR	



Class	9 (M7) Miscellaneous dangerous substances and articles.
Label	9

IMDG, IATA



Class	9 Miscellaneous dangerous substances and articles.
Label	9

14.4 Packing group

DOT	N/A
ADR, IMDG, IATA	III

14.5 Environmental hazards

Product contains environmentally hazardous substances: N - cyclohexylbenzothiazole- 2 -sulphenamide

Marine pollutant Yes

Special marking (ADR) Symbol (fish and tree)

Special marking (ADR) Symbol (fish and tree)

Special marking (IATA)	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
Danger code (Kemler)	90
EMS Number	F-A,S-F
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5 kg
Transport category	3
Tunnel restriction code	E
UN "Model Regulation"	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O. S. (N-cyclohexylbenzothiazole-2-sulphenamide), 9, III

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
United States (USA)

SARA Section 355 (extremely hazardous substances)	Substance is not listed.
SARA Section 313 (Specific toxic chemical listings)	Substance is not listed.
TSCA (Toxic Substances Control Act)	Substance is listed.
Proposition 65 (California)	
Chemicals known to cause cancer	Substance is not listed.
Chemicals known to cause reproductive toxicity for females	Substance is not listed.
Chemicals known to cause reproductive toxicity for males	Substance is not listed.
Chemicals known to cause developmental toxicity	Substance is not listed.
Carcinogenic Categories	
EPA (Environmental Protection Agency)	Substance is not listed.
IARC (International Agency for Research on Cancer)	Substance is not listed.
TLV (Threshold Limit Value established by ACGIH)	Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.
Canada	
Canadian Domestic Substances List (DSL)	Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%)	Substance is not listed.
Canadian Ingredient Disclosure list (limit 1%)	Substance is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:



Safety Data Sheet

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)