

Sovchem[®] MBTS

| 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION | |
|---|--|
| Manufacturer Sovereign Chemical Company 4040 Embassy Parkway, Suite 190 Akron, OH 44333 | Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA) |
| Trade Name(s): Sovchem [®] MBTS Powder, Granule or Oiled Powder | Chemical Name: 2-Mercaptobenzothiazole Disulfide |
| 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 According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS | Date of Issue: November 1, 2021 |

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Information in accordance with US 29 CFR 1910.1200 (Hazcom 2012) and Regulation (EC) No 1272/2008
 The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation:
 H400, H410.

| | |
|-------------------|---|
| Aquatic Acute 1 | H400 Very toxic to aquatic life. |
| Aquatic Chronic 1 | H410 Toxic to aquatic life with long lasting effects. |
| Skin Sens. 1 | H317 May cause an allergic skin reaction. |

2.2 Label elements

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

The product is additionally classified and labelled according to the Globally Harmonized System (GHS)
 within the United States.

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

Hazard pictograms



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS)



GHS07 GHS09

Signal word: Warning

Hazard-determining components of labeling: di(benzothiazol-2-yl) disulphide

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
 P280 Wear protective gloves and eye protection.
 P261 Avoid breathing dust.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 Additional information
 EUH031 Contact with acids liberates toxic gas.
 Contains di(benzothiazol-2-yl) disulphide. May produce an allergic reaction.

2.3 Other hazards
 Results of PBT and vPvB assessment
 PBT: Not applicable.
 vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures
 Description: Mixture of substances listed below with nonhazardous additions.
 Dangerous components

| | | |
|--|---|---------|
| CAS: 120-78-5 EINECS: 204-424-9 Index number: 613-135-00-0 | 2 - Mercaptobenzothiazole Disulfide  Aquatic Acute 1, H400, Aquatic Chronic 1, H410  Skin Sens. 1, H317 | 90-100% |
| CAS: 149-30-4 EINECS: 205-736-8 Index number: 613-108-003 | benzothiazole-2-thiol  Aquatic Acute 1, H400, Aquatic Chronic 1, H410  Skin Sens. 1, H317 | <5.0% |
| CAS: 8042-47-5 EINECS: 232-455-8 | White Mineral Oil  Asp. Tox. 1, H304 | <5.0% |

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.
 In case of irregular breathing or respiratory arrest provide artificial respiration.
 In case of unconsciousness place patient stably inside position for transportation.
 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

Allergic reactions

Gastric or intestinal disorders

Dizziness

Coughing

Hazards: Danger of impaired breathing.

4.3 Indication of any immediate medical attention and special treatment needed

Treat skin and mucous membrane with antihistamine and corticoid preparations.

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

Monitor circulation.

If necessary, oxygen respiration treatment.

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: During heating or in case of fire poisonous gases are produced.

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

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.

Do not flush with water or aqueous cleansing agents.

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

Store in cool, dry place in tightly closed receptacles.

Prevent formation of dust.

Use only in well ventilated areas.

Information about fire and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles

Store in a cool location.

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

Protect from humidity and water.

Information about storage in one common storage facility

Do not store together with acids.

Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions

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

Protect from humidity and water.

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 Section 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

The usual precautionary measures are to be adhered to when handling chemicals.

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 in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present.

Protection of hands



Protective gloves

The glove material must 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

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene 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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time must be found out by the manufacturer of the protective gloves and must 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: Powder. Color: Cream. | Change in Condition Melting Point/Melting Range: Undetermined. Boiling Point/Boiling Range: Undetermined. |
| Odor: Aromatic | Octanol/Water Partition Coefficient: Not determined. |
| Odor threshold: Not determined. | pH Value: Not applicable. |
| Vapor pressure: Not applicable. | Flash point: Not applicable. |
| Density at 20 °C: 1.56 g/cm ³ . | Flammability (solid, gaseous): Not determined. |
| Relative density: Not determined. | Ignition temperature: Not determined. |
| Vapor density: Not applicable. | Decomposition temperature: Not determined. |
| Evaporation rate: Not applicable. | Self-igniting: Product is not self-igniting. |
| 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. |
| Solvent content: Solids content: 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

Contact with acids releases toxic gases.

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

Reacts with oxidizing agents.

As the product is supplied it is not capable of dust explosion; however, enrichment with fine dust causes risk of dust explosion.

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

Sulfur oxides (SO_x)

Nitrogen oxides

Carbon monoxide and carbon dioxide

Danger of forming toxic pyrolysis products.

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.

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

Danger through skin adsorption.

Toxic and/or corrosive effects may be delayed up to 24 hours.

Sensitization: Sensitization possible by skin 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: Not easily biodegradable.

12.3 Bio-accumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Ecotoxic effects

Remark: Very toxic for fish.

Additional ecological information

General notes

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.

Un-cleaned packaging

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORTATION INFORMATION

14.1 UN-Number

DOT, TDG

Not regulated.

ADR, IMDG, IATA

UN3077

14.2 UN proper shipping name

DOT, TDG

Not regulated.

ADR

3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (di(benzothiazol-2-yl) disulphide)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (di(benzothiazol-2-yl) disulphide), MARINE POLLUTANT

IATA

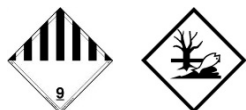
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (di(benzothiazol-2-yl) disulphide)

14.3 Transport hazard class(es)

DOT, TDG

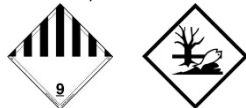
Not regulated.

ADR



Label: 9

IMDG, IATA



Label: 9

14.4 Packing group
DOT, TDG
ADR, IMDG, IATA

Not regulated.
III

14.5 Environmental hazards

Marine pollutant

Special Marking (ADR)
Special Marking (IATA)

Product contains environmentally hazardous substances:
di(benzothiazol-2-yl) disulphide
Yes
Symbol (fish and tree)
Symbol (fish and tree)
Symbol (fish and tree)

14.6 Special precautions for user
Danger code (Kemler)
EMS Number

Warning: Miscellaneous dangerous substances and articles
90
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. (di(benzothiazol-2-yl) disulphide), 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) | None of the ingredients is listed. |
| SARA Section 313 (Specific toxic chemical listings) | None of the ingredients is listed. |
| TSCA (Toxic Substances Control Act) | All ingredients are listed. |
| Proposition 65 (California) | |
| Chemicals known to cause cancer | None of the ingredients is listed. |

| | |
|--|--|
| Chemicals known to cause reproductive toxicity for females | None of the ingredients is listed. |
| Chemicals known to cause reproductive toxicity for males | None of the ingredients is listed. |
| Chemicals known to cause developmental toxicity | None of the ingredients is listed. |
| Carcinogenic Categories | |
| EPA (Environmental Protection Agency) | None of the ingredients is listed. |
| IARC (International Agency for Research on Cancer) | None of the ingredients is listed. |
| TLV (Threshold Limit Value established by ACGIH) | None of the ingredients is listed. |
| NIOSH-Ca (National Institute for Occupational Safety and Health) | None of the ingredients is listed. |
| OSHA-Ca (Occupational Safety & Health Administration) | None of the ingredients is listed. |
| Canada | |
| Canadian Domestic Substances List (DSL) | 120-78-5 di(benzothiazol-2-yl) disulphide. 8042-47-5 White Mineral Oil. |
| Canadian Ingredient Disclosure list (limit 0.1%) | None of the ingredients is listed. |
| Canadian Ingredient Disclosure list (limit 1%) | 120-78-5 di(benzothiazol-2-yl) disulphide. |

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

ADR: Accord européen r 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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)