SOVEREIGN CHEMICAL

Safety Data Sheet

Sovchem® CDBC

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® CDBC Granule, Sovchem® CDBC Powder	Synonyms: Copper dibutyldithiocarbamate; CDBC
Chemical Name: Copper, bis(dibutylcarbamodithioato-s-s')	CAS Number: 13927-71-4
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Agricultural pesticides.
Issued By: Sovereign Chemical Company According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	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

GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.4

GHS07 Health hazard

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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

Xn; Harmful

R22 Harmful if swallowed.

Xn; Sensitizing

R42/43 May cause sensitization by inhalation and skin contact.

Xi; Irritant

R36 Irritating to eyes.

Information concerning particular hazards for human and environment: Can cause an allergic reaction (antabuse effect) if alcohol is consumed while handling this product.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008:

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

Hazard pictograms

GHS07 GHS08

Signal word: Danger

Hazard-determining components of labeling: Copper, bis(dibutylcarbamo-dithioato-s-s')

Hazard statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.

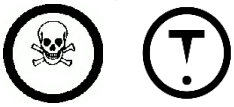
Precautionary statements

P285	In case of inadequate ventilation wear respiratory protection.
P280	Wear protective gloves and eye protection.
P264	Wash thoroughly after handling.
P261	Avoid breathing dust.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

Additional information: Contains Proprietary polymeric phenol. May produce an allergic reaction.

Hazard description

WHMIS-symbols



D1B – Toxic material causing immediate and serious toxic effects

NFPA ratings (scale 0-4)

Health = 2
Fire = 1
Reactivity = 0

HMIS ratings (scale 0-4)

Health = *2
Fire = 1
Reactivity = 0

* - Indicates a long-term health hazard from repeated or prolonged exposures.

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: 13927-71-4 Copper, bis(dibutylcarbamo-dithioato-s-s')
Identification number(s): EC Number: 237-695-7

4. FIRST AID MEASURES

4.1 Description of first aid measures
General information
Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.
Immediately remove any clothing soiled by the product.
After inhalation
Supply fresh air.
Seek immediate medical advice.
In case of unconsciousness place patient stably in side 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.
A person vomiting while laying on their back should be turned onto their side.

4.2 Most important symptoms and effects, both acute and delayed
Breathing difficulty.
Coughing.
Dizziness.
Gastric or intestinal disorders.
Nausea.
Hazards
Danger of impaired breathing.
Danger of pulmonary edema.
Conditions may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed
If swallowed, gastric irrigation with added, activated carbon.
Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.
If necessary oxygen respiration treatment.
Later observation for pneumonia and pulmonary edema.

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
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
Isolate area and prevent access.
Ensure adequate ventilation

6.2 Environmental precautions
Do not allow to reach sewage system or any water course.
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.
Dispose contaminated material as waste according to item 13.

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
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
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
Provide ventilation for receptacles.
Avoid storage near extreme heat, ignition sources or open flame.
Information about storage in one common storage facility
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.
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.
Do not inhale gases/fumes/aerosols.
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.
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 test 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
Neoprene gloves.
Nitrile rubber, NBR.
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
Contact lenses should not be worn.

Safety glasses

Body protection: Protective work clothing.
Limitation and supervision of exposure into the environment

No special requirements.
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: Solid. Color: Not determined.	Change in Condition Melting Point/Melting Range: Undetermined. Boiling Point/Boiling Range: 496°F/258°C.
Odor: Characteristic.	Octanol/Water Partition Coefficient: Not determined.
Odor threshold: Not determined.	pH: Not applicable.
Vapor Pressure: Not applicable.	Flash point: 228°F/109°C.
Density: Not determined.	Flammability (solid, gaseous): Product is not flammable.
Relative density: Not determined.	Ignition temperature: Not determined.
Vapor Density: Not applicable.	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.
Solvent content: Organic solvents: 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 strong oxidizing agents.
Reacts with alkali, amines and strong acids.
Toxic fumes may be released if heated above the decomposition point.
Contact with acids releases toxic gases.

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
Toxic metal oxide smoke.
Carbon monoxide and carbon dioxide.
Sulfur oxides (SOx).
Nitrogen oxides.

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: Irritating effect.
Sensitization
Sensitization possible through inhalation.
Sensitization possible through skin contact.
Subacute to chronic toxicity: Toxic and/or corrosive effects may be delayed up to 48 hours.
Additional toxicological information
Harmful.
Irritant.
Danger through skin absorption.
Sensitization: Sensitization possible by inhalation and/or dermal contact.
Repeated dose toxicity
May cause damage to organs through prolonged or repeated exposure.
Repeated exposures may result in skin and/or respiratory sensitivity.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: The produce is biodegradable after prolonged adaptation.

12.3 Bioaccumulative potential: May be accumulated in organism.

12.4 Mobility in soil: No further relevant information available.
Ecotoxical effects
Remark
The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.
Due to mechanical actions of the product (e.g. agglutinations) damages may occur.
Additional ecological information
General notes
The declarations are valid for the component with the highest toxicological risk.
The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary.
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment cannot be excluded.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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
Recommendations
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, ADR, ADN, IMDG, IATA N/A

14.2 UN proper shipping name
DOT, ADR, ADN, IMDG, IATA N/A

14.3 Transport hazard class(es):
DOT, ADR, ADN, IMDG, IATA, Class N/A

14.4 Packing group
DOT, ADR, IMDG, IATA N/A

14.5 Environmental hazards
Marine pollutant No

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation"

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)	Copper compound.
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 not 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

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)