

# Sovchem<sup>®</sup> ZDMC

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
<b>Manufacturer</b> Sovereign Chemical Company 4040 Embassy Parkway, Suite 190 Akron, OH 44333	<b>Emergency Contact</b> Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
<b>Trade Name(s):</b> Sovchem <sup>®</sup> ZDMC Powder, Oiled Powder	<b>Synonyms:</b> Zinc Dimethyl Dithiocarbamate, Ziram
<b>Chemical Name:</b> Zinc, bis (dimethylcarbamoedithioato-s-s')	
<b>Relevant identified uses of the substance or mixture and uses advised against:</b> No further relevant information available.	<b>Application of the substance/the preparation:</b> Rubber chemical, Agricultural chemical.
<b>Issued By:</b> Sovereign Chemical Company  According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	<b>SDS Number:</b> 1842 <b>Date of Issue:</b> July 14, 2015 <b>Revision Number:</b> 3 (Supersedes: February 25, 2014) <b>Change(s):</b> Include inhalation hazard for classification.

## 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.



GHS06 Skull and crossbones  
 Aquatic Tox. 2 H330 Fatal if inhaled.



GHS08 Health hazard  
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion  
 Eye Dam. 1 H318 Causes serious eye damage.








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  
 Acute Tox. 4 H302 Harmful if swallowed.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.

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

-  T+; Very toxic  
R26: Very toxic by inhalation.
-  Xn; Harmful  
R22-48/22: Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if
-  Xi; Irritant  
R37-41: Irritating to respiratory system. Risk of serious damage to eyes.
-  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.  
 Carcinogenic: Category 3 NOTE: May react with nitrosating agents during rubber vulcanization to form nitrosamines. Some nitrosamines are suspect human carcinogens.  
 Aggravated Conditions: Alcohol consumption problems. Pulmonary disorders. This material or its emissions may cause an allergic or sensitization reaction and thereby aggravate systemic disease.

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: H400.

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

Hazard pictograms



Signal word: Danger

Hazard-determining components of labeling: ziram (ISO)

Hazard statements

- H302 Harmful if swallowed.
- H330 Fatal if inhaled.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P284 Wear respiratory protection.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P273 Avoid release to the environment.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.

P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P320	Specific treatment is urgent (see on this label).
P321	Specific treatment (see on this label).
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P363	Wash contaminated clothing before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P391	Collect spillage.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information: Contains ziram (ISO). May produce an allergic reaction.

Hazard description

WHMIS-symbols



D1B - Toxic material causing immediate and serious toxic effects  
 D1A - Toxic material causing immediate and serious toxic effects.

NFPA ratings (scale 0-4)



Health = 4  
 Fire = 1  
 Reactivity = 0

HMIS ratings (scale 0-4)



Health = \*4  
 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: 137-30-4 ziram (ISO)

Identification number(s)  
 EC Number: 205-288-3  
 Index number: 006-012-00-2  
 Dangerous components

CAS: 8042-47-5 EINECS: 232-455-8	White Mineral Oil  Xn R65  Asp. Tox. 1, H304	<5.0%
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Additional information: For the wording of the listed risk phrases refer to section 16.

**4. FIRST AID MEASURES**

4.1 Description of first aid measures

General information

- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.
- Remove breathing equipment only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation

- Supply fresh air or oxygen; call for doctor.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- Do not use mouth to mouth or mouth to nose resuscitation.
- Use a respiratory bag or breathing device.

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. Then 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

- Coughing
- Breathing difficulty
- Dizziness
- Nausea
- Cramp
- Disorientation
- Cyanosis

Hazards

- Danger of impaired breathing.
- Danger of gastric perforation.
- Danger of pulmonary edema.
- Danger of convulsion.
- Danger of circulatory collapse.

4.3 Indication of any immediate medical attention and special treatment needed

Contains Ziram. Consult literature for specific antidotes.  
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 cortical steroid inhalants.  
If necessary, oxygen respiration treatment.  
Monitor circulation, possible shock treatment.  
Medical supervision for at least 48 hours.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing agents

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

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

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

Do not allow to penetrate the ground/soil.

### 6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Do not flush with water or aqueous cleansing agents

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

- Thorough dedusting.
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of dust.

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.
- Store in a cool location.

Information about storage in one common storage facility

- Store away from oxidizing agents.
- Do not store together with acids.
- Store away from foodstuffs.

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 section 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.
- Store protective clothing separately.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.

Respiratory protection

Respiratory protection required.



Combined Organic Vapor and Particulate Respirator is recommended for use during all processing

Self-contained respiratory protective device.

Filter P3

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

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.

Not suitable are gloves made of the following materials

Leather gloves

Strong material gloves

Eye protection

Contact lenses should not be worn.



Safety glasses

Body protection



Boots

Use protective suit.

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: Whitish.	Change in Condition Melting Point/Melting Range: Undetermined. Boiling Point/Boiling Range: Undetermined.
Odor: Light.	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: 1.66 g/cm <sup>3</sup> .	Flammability (solid, gaseous): May cause fire.
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.

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 acids.

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

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: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

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

Acute toxicity

LD/LC50 values relevant for classification		
137-30-4 ziram (ISO)		
Oral	LD50	1400 mg/kg (rat)
Inhalative	LC50/4h	0.13 mg/l (rat) in air

Primary irritant effect

On the skin: Irritant to skin and mucous membranes.

On the eye: Strong irritant with the danger of severe eye injury.

Sensitization

Sensitizing effect through inhalation is possible by prolonged exposure.

Sensitization possible through skin contact.

Additional toxicological information

Danger through skin adsorption.

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

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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: Toxic for aquatic organisms.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bio-accumulative potential: May be accumulated in organism.

12.4 Mobility in soil: No further relevant information available.

#### Ecotoxicological effects

##### Remark

Very toxic for fish.

Inhibition of the development of the biomass.

#### Additional ecological information

##### General notes

This statement was deduced from the properties of the single component.

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 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 in to 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.





After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

#### Un-cleaned packaging

Recommendation: Disposal must be made according to official regulations.

**14. TRANSPORTATION INFORMATION**

14.1 UN-Number		
DOT, ADR, IMDG, IATA		UN2811
14.2 UN proper shipping name		
DOT, IATA		TOXIC SOLID, ORGANIC, N.O.S. (zinc dimethyldithiocarbamate),
ADR		2811, TOXIC SOLID, ORGANIC, N.O.S. (zinc dimethyldithiocarbamate)
IMDG		TOXIC SOLID, ORGANIC, N.O.S
DOT		
		
Class		6.1 Toxic substances.
Label		6.1
ADR		
 		
Class		6.1 (T2) Toxic substances.
Label		6.1
IMDG, IATA		
		
Class		6.1 Toxic substances.
Label		6.1
14.4 Packing group		
DOT, ADR, IMDG, IATA		II
14.5 Environmental hazards		
Marine pollutant		No
Special Marking (ADR)		Symbol (fish and tree)
14.6 Special precautions for user		Warning: Toxic substances.
Danger code (Kemler)		60
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)		500 g
Transport category		2
Tunnel restriction code		D/E
UN "Model Regulation"		UN2811, TOXIC SOLID, ORGANIC, N.O.S., ENVIRONMENTALLY HAZARDOUS, 6.1, II

**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)	137-30-4 ziram (ISO)
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)	137-30-4, ziram (ISO) 3
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%)	137-30-4, ziram (ISO)

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.

Relevant phrases

- H304 May be fatal if swallowed and enters airways.
- R65 Harmful: may cause lung damage if swallowed.

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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent