




# Sovchem<sup>®</sup> DPTU

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 <sup>®</sup> DPTU Powder	Chemical Name: 1,3-Diphenyl-2-thiourea
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Used as rubber accelerator in rubber goods manufacture.
Issued By: Sovereign Chemical Company 4040 Embassy Parkway, Suite 190 Akron, Ohio 44333	Date of Issue: June 15, 2026

## 2. HAZARDS IDENTIFICATION

### *Classification of the substance or mixture*

Information in accordance with US 29 CFR 1910.1200 (Hazcom 2012), Regulation (EC) No 1272/2008, 1907/2006/EC (REACH), and GHS

Hazard Pictograms (CLP)	:  GHS07,  GHS08,  GHS09
Signal Word	: Warning
Hazard statements (CLP)	: H317 – May cause an allergic skin reaction, Category 1 H361 - Suspected of damaging fertility or the unborn child, Category 2 H373- Causes damage to organs through prolonged or repeated exposure, Category 2 H411 - Toxic to aquatic life with long lasting effects, Category 2
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P308 + P313 - exposed or concerned: Get medical advice/attention. P405 -Store locked up. P260 - Do not breathe dust/fume/gas/mist/vapors/spray P314 - Get medical advice/attention if you feel unwell P261 – Avoid breathing dust/fume/gas/mist/vapors/spray P272 - Contaminated work clothing should not be allowed out of the workplace P280 - Wear protective clothing, eye protection, face protection, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water P321 – Specific treatment (see supplemental first aid instructions on

Other Hazard : this label)  
 P333+ P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P501 - Dispose of contents/ container to an approved waste disposal plant  
 P363 - Wash contaminated clothing before reuse  
 P273 - Avoid release to the environment  
 P391 - Collect spillage. Hazardous to the aquatic environment  
 : This substance does not meet the criteria for PBT / vPvB of REACH regulation, annex XIII

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance

Chemical Name	CAS No	EC No	Weight %	Classification
1,3-Diphenyl-2-thiourea	102-08-9	203-004-2	≥ 97	H317 – May cause an allergic skin reaction, Category 1 H361 - Suspected of damaging fertility or the unborn child, Category 2 H373- Causes damage to organs through prolonged or repeated exposure, Category 2 H411 - Toxic to aquatic life with long lasting effects, Category 2

**4. FIRST AID MEASURES**

*Description of first aid measures*

First-aid measures general: In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

*Most important symptoms and effects, both acute and delayed*

General: May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. May cause damage to organs (Thyroid) through prolonged or repeated exposure.

*Indication of any immediate medical attention and special treatment needed*

General: Treat symptomatically.

**5. FIRE FIGHTING MEASURES***Extinguishing media*

Suitable extinguishing agents: Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide.

Unsuitable extinguishing agents: No information available.

*Special hazards arising from the substance or mixture*

General: Combustible. Dust suspended in air in critical proportions and in the presence of an ignition source may present an explosion hazard. Release of toxic and corrosive gases/vapors (carbon oxides, nitrous vapors, sulfur oxides) if product is involved in a fire.

*Advice for firefighters*

General: Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear full protective clothing, including self-contained breathing equipment. Prevent fire-fighting water from entering surface water or groundwater. Contain escaping vapors with water.

**6. ACCIDENTAL RELEASE MEASURES***Personal precautions, protective equipment and emergency procedures*

General measures: Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

*Environmental precautions*

General precautions: Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

*Methods and material for containment and cleaning up*

General methods and materials: Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

*Reference to other sections*

Sections: See Section 7 for more information  
See section 8 for more information  
See section 13 for more information

## 7. HANDLING AND STORAGE

*Precautions for safe handling*

General: Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

*Conditions for safe storage, including any incompatibilities*

General: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Store away from strong oxidizing materials. Keep locked up and out of reach of children. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations.

*Specific end use(s)*

General: No other information available.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

*Control Parameters*

Derived no effect level (DNEL): No information available. No chemical safety assessment has not been carried out.

Predicted no effect concentration (PNEL):	No information available. No chemical safety assessment has not been carried out.
<i>Exposure controls</i>	
Engineering controls:	Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations. Remove all sources of ignition.
Personal protective equipment:	Suitable protective clothing.
Eye protection:	Safety goggles or eye protection in combination with breathing protection.
Hand protection:	Use protective rubber gloves and protective clothing. Glove material: nitrile rubber; Glove thickness: 0.11 mm; Breakthrough time: > 480 min.
Respiratory protection:	Dust mask recommended. Half mask with a particle filter. Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances.
Thermal hazard:	No information available.
Environmental exposure controls:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

*Information on basic physical and chemical properties*

Form: Solid powder	Melting Point/Range: >148 °C
Color: White	Boiling Point/Range: >250 °C
Odor: Odorless	Odor threshold: Not available
pH: Not determined	Flash point: 141.5 - 187.8 °C (760 mmHg)
Vapor Pressure: 0.000223 Pa	Flammability: Not flammable
Density at 20 °C: 1.33 g/cm <sup>3</sup>	Ignition temperature: Not available

Relative density: Not available	Decomposition temperature: >150 °C
Solubility: Practically insoluble in water. Soluble in ethanol, ether, chloroform.	Partition coefficient (n-octanol/water): log Pow: 3.6
Oxidizing properties: Not determined	Explosion limits: Lower: Not applicable Upper: Not applicable

Other information: No further relevant information available.

## 10. STABILITY AND REACTIVITY

Reactivity:	Stable under recommended storage and handling conditions.
Chemical Stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Risk of dust explosion. Hazardous polymerization does not occur.
Conditions to avoid:	Heat, flames and sparks. Incompatible materials.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides, sulfur oxides, nitrogen oxides, ammonia, hydrogen cyanide.

## 11. TOXICOLOGICAL INFORMATION

### *Information on toxicological effects*

Acute toxicity: Not classified.

N-N'-Diphenyl thiourea (CAS #: 102-08-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation:	Slightly irritating, rabbit. Not classified.
Serious eye damage:	Slightly irritating, rabbit. Not classified.
Sensitization:	May cause an allergic skin reaction, guinea pig.
Germ cell mutagenicity:	Negative.
Carcinogenicity:	Not listed as carcinogen by ACGIH, IARC, NIOSH, NTP, or OSHA.

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

STOT single exposure: Not classified

STOT multiple exposure: May cause damage to organs (Thyroid) through prolonged or repeated exposure.

Aspiration hazard: Not classified

Endocrine disrupting properties: The components are not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Other information: No information available

**12. ECOLOGICAL INFORMATION**

*Toxicity*  
 Toxic to aquatic life with long lasting effects.

N-N'-Diphenyl thiourea (CAS #: 102-08-9)	
LC50 96h - Fish	>33 mg/L Danio rerio (previous name: Brachydanio rerio)
EC50 48h - Crustacea	10.2 mg/L Daphnia magna
EC50 72h - Algae	14 mg/L Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic Crustacea	0.15 mg/L Daphnia magna
NOEC chronic algae	4.7 mg/L Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

*Persistence and degradability*  
 Not readily biodegradable 0%, Exposure time: 28 d.

*Bioaccumulative potential*

N-N'-Diphenyl thiourea (CAS #: 102-08-9)	
Partition coefficient (LogPow)	3.6
Bioconcentration factor (BCF)	82.4

*Mobility in soil*  
 Log Koc: 3.07

*Results of PBT and vPvB assessment*  
 The components are not considered to be persistent, bioaccumulating nor toxic (PBT).  
 The components are not considered to be very persistent nor very bioaccumulating (vPvB).

*Endocrine disrupting properties*

The components are not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

*Other adverse effects*

No information available.

**13. DISPOSAL CONSIDERATIONS**

*Waste treatment methods*

Waste from residues/unused products: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORTATION INFORMATION**

UN-Number	
DOT, ADR, ADN, IMDG, IATA, RID	UN3077
UN proper shipping name	
DOT, ADR, ADN, IMDG, IATA, RID	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (Tetramethyl thiuram disulfide)
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA, RID	9
Packing group	
DOT, ADR, ADN, IMDG, IATA, RID	III
Environmental hazards	Marine Pollutant
Marine pollutant	Yes (fish and tree symbol)
Special precautions for user	Not data available
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code UN "Model Regulation"	Not applicable

**15. REGULATORY INFORMATION**

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

SARA Section 355 (extremely hazardous substances)	Not listed
SARA Section 313 (Specific toxic chemical listings)	Not listed
TSCA (Toxic Substances Control Act)	Listed

Proposition 65 (California)	
Chemicals known to cause cancer	Not listed
Chemicals known to cause reproductive toxicity for females	Not listed
Chemicals known to cause reproductive toxicity for males	Not listed
Chemicals known to cause developmental toxicity	Not listed
Carcinogenic Categories	
IARC (International Agency for Research on Cancer)	Not listed
TLV (Threshold Limit Value established by ACGIH)	Not listed
NIOSH-Ca (National Institute for Occupational Safety and Health)	Not listed
OSHA (Occupational Safety & Health Administration)	Not listed
Canada	
Canadian Domestic Substances List (DSL)	Listed
Canadian Ingredient Disclosure list (limit 0.1%)	Not listed
Canadian Ingredient Disclosure list (limit 1%)	Not listed
REACH	
REACH Candidate List	Not listed
REACH XIV List	Not listed

Chemical safety assessment:

No chemicals safety assessment has 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