




## Sovchem® DETU

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® DETU Crystal	Chemical Name: N,N,-Diethyl 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: July 1, 2025

## 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)	:  GHS05,  GHS07,  GHS08
Signal Word	: Danger
Hazard statements (CLP)	: <ul style="list-style-type: none"> <li>H302 - Harmful if swallowed, Category 4</li> <li>H312 - Harmful in contact with skin, Category 4</li> <li>H317 - May cause an allergic skin reaction, Category 1</li> <li>H318 - Causes serious eye damage, Category 1</li> <li>H372 - Causes damage to organs through prolonged or repeated exposure.</li> </ul>
Precautionary statements (CLP)	: <ul style="list-style-type: none"> <li>P261 - Avoid breathing dust/fume/gas/mist/vapors/spray</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace</li> <li>P280 - Wear protective clothing, eye protection, face protection, protective gloves</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of soap and water</li> <li>P321 - Specific treatment (see supplemental first aid instructions on this label)</li> <li>P333+ P313 - If skin irritation or rash occurs: Get medical advice/attention</li> <li>P363 - Wash contaminated clothing before reuse</li> <li>P501 - Dispose of contents/ container to an approved waste disposal plant</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> </ul>

P301+ P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.  
P330 - Rinse mouth.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

PBT and vPvB : This substance does not meet the PBT or vPvB criteria of REACH regulation, annex XIII

Endocrine disrupting properties : The substance is 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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	EC No	Weight %	Classification
N,N,-Diethyl thiourea	105-55-5	203-308-5	≥ 97	H302 - Harmful if swallowed, Category 4 H312 - Harmful in contact with skin, Category 4 H317 - May cause an allergic skin reaction, Category 1 H318 - Causes serious eye damage, Category 1 H372 - Causes damage to organs through prolonged or repeated exposure.

### 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.

First-aid measures after eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Do NOT induce vomiting. Rinse immediately with plenty of water and seek medical advice.

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

Symptoms effects: Harmful if swallowed. Harmful in contact with skin. Causes serious eye damage. May cause an allergic skin reaction. Causes damage to organs (Thyroid) through prolonged or repeated exposure.

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

Skin irritation: Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material. Attending physician should treat exposed patients symptomatically.

## 5. FIRE FIGHTING MEASURES

*Extinguishing media*

Suitable extinguishing agents: Water, carbon dioxide (CO<sub>2</sub>), foam, dry powder.

Unsuitable extinguishing agents: No information available

*Special hazards arising from the substance or mixture*

General: Thermal decomposition can lead to release of irritating and toxic gases and vapors, such as carbon oxides, sulfur oxides, nitrogen oxides.

*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.

## 6. ACCIDENTAL RELEASE MEASURES

*Personal precautions, protective equipment and emergency procedures*

General: 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. Emergency personnel: Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated. Apply the same recommendations as above.

#### *Environmental precautions*

General: 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: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### *Reference to other sections*

General: See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

## 7. HANDLING AND STORAGE

#### *Precautions for safe handling*

General measures: 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*

Storage: 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)*

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

### *Control Parameters*

Exposure limits: Not data available

Derived no effect limit (DNEL): Not data available. No chemical assessment has been carried out.

Predicted no effect concentration (PNEC): No data available. No chemical assessment has been carried out.

### *Exposure controls*

Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations. Remove all sources of ignition.

Eye/face protection: Safety goggles or eye protection in combination with breathing protection.

Hand protection: Use protective rubber gloves. Glove material: nitrile rubber; Glove thickness: 0.11 mm; Breakthrough time: > 480 min.

Body protection: Suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

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 crystals or powder	Melting Point/Range: 76-78°C
Color: White	Boiling point/Range: 215°C
Odor: Odorless	Relative vapor density: Not applicable
Odor threshold: Not determined	pH value: 7 (38 g/L, 20°C)

Vapor Pressure: 0.001 Pa at 20 °C	Flash point: 186°C
Density: 0.77 g/cm <sup>3</sup> at 20 °C	Flammability: Not flammable
Particle characteristics: D50 ; > 10 - < 1 000 µm	Auto Ignition temperature: Not applicable
Partition coefficient (n-octanol/water): Log Pow: 0.57	Decomposition temperature: > 100°C
Solubility in / Miscibility with water: 43g/L at 20 °C	Oxidizing properties: Not determined
Viscosity Dynamic: Not applicable Kinematic: Not applicable	Explosion limits Lower: Not applicable Upper: Not applicable

## Other information

Residues of 150µm sieve	0.5% max
Ash content	0.3% max
Loss on drying	0.3% max

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under recommended storage and handling conditions.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

None under normal processing. 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:	Harmful if swallowed
Acute toxicity (oral, rat):	LD50 930 mg/kg bw
Acute toxicity (dermal, rabbit):	LD50 >1,000 < 2,000 mg/kg bw
Skin corrosion/irritation:	Non-irritating to the skin, rabbit
Serious eye damage/irritation:	Causes serious eye damage, rabbit
Skin sensitization:	May cause an allergic skin reaction, guinea pig
Germ cell mutagenicity:	Negative
Carcinogenicity:	IARC - Not classified
Reproductive toxicity:	Not classified
STOT single exposure:	Not classified
STOT multiple exposure:	Causes damage to organs (Thyroid) through prolonged or repeated exposure
Aspiration hazard:	Not classified
Endocrine disrupting properties:	The substance is 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 other information available

## 12. ECOLOGICAL INFORMATION

### Toxicity

Acute toxicity:	LC50 (96h, Fish): 910 mg/L Danio rerio (previous name: Brachydanio rerio)
Acute toxicity:	EC50 (48h, Crustacea): 56 mg/L Daphnia magna
Acute toxicity:	EC50 (72h, Algae): 310 mg/L Pseudokirchneriella subcapitata

### Persistence and degradability

Information: Not readily biodegradability  
 Biodegradation 3% (28 days)

*Bioaccumulation potential*

Information: Log Pow – 0.57  
 Low bioaccumulation potential.

*Mobility in soil*

Information: Log Koc: 1.59

*Results of PBT and vPvB assessment*

Information: This substance is not considered to be persistent, bioaccumulating not toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

*Endocrine disrupting properties*

Information: The substance is 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*

Information: 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 Not regulated

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Not regulated



Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	Not regulated
Packing group	
DOT, ADR, ADN, IMDG, IATA	Not regulated
Environmental hazards	
Marine pollutant	No
Special precautions for user	No information 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

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)	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: 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.