




Sovchem® TETD

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® TETD Crystal or Pellet	Chemical Name: Tetraethyl thiuram 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 4040 Embassy Parkway, Suite 190 Akron, Ohio 44333	Date of Issue: August 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)	:  GHS07,  GHS08,  GHS09
Signal Word	: Warning
Hazard statements (CLP)	: <ul style="list-style-type: none"> H302 - Harmful if swallowed, Category 4 H317 - May cause an allergic skin reaction, Category 1 H373 - Cause damage to organs through prolonged or repeated exposure, Category 2 H400 - Very toxic to aquatic life, Category 1 H410 - Very toxic to aquatic life with long lasting effects, Category 1
Precautionary statements (CLP)	: <ul style="list-style-type: none"> P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301 + P312- IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell P330 - Rinse mouth P501 - Dispose of contents/ container to an approved waste disposal plant 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 this label)

P333+ P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P314 - Get medical advice/attention if you feel unwell.
 P273 - Avoid release to the environment
 P391 - Collect spillage. Hazardous to the aquatic environment
 Other Hazard : 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
Tetraethyl thiuram disulfide	97-77-8	202-607-8	≥ 97	H302 - Harmful if swallowed, Category 4 H317 – May cause an allergic skin reaction, Category 1 H373 – Cause damage to organs through prolonged or repeated exposure, Category 2 H400 - Very toxic to aquatic life, Category 1 H410 - Very toxic to aquatic life with long lasting effects, Category 1

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:	IF INHALED: 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 persists, call a physician.
First-aid measures after eye contact:	IF IN EYES: 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:	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Most important symptoms and effects, both acute and delayed

General: Harmful if swallowed. May cause an allergic skin reaction. May cause damage to organs (liver, nervous system) through prolonged or repeated exposure (oral).

Indication of any immediate medical attention and special treatment needed

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

5. FIRE FIGHTING MEASURES*Extinguishing media*

Suitable extinguishing agents: Water spray, water mist, foam, dry chemical powder.
Unsuitable extinguishing agents: High volume water jet.

Special hazards arising from the substance or mixture

General: Development of hazardous combustion gases or vapors possible in the event of fire. Emits toxic fumes under fire conditions: Hydrogen cyanide (HCN), sulfur oxides (SO_x), nitrogen oxides (NO_x).

Advice for firefighters

General: Evacuate personnel to safe areas. Move containers from fire area if you can do it without risk. Cool drums with water spray. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Stay upwind. Ensure adequate ventilation, especially in confined areas.

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

General measures: Evacuate personnel to safe areas. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Use personal protection recommended in Section 8. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Avoid breathing dust. Wash thoroughly after handling.

Environmental precautions

General precautions: Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

General methods and materials: Clean up spills immediately, observing precautions in section 8. Sweep up, then place into a suitable container for disposal. Avoid generation of dust.

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. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Avoid generation of dust. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

General: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Store away from strong oxidizing agents. Avoid exposure to direct sunlight. 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

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
Tetraethyl thiuram disulfide (CAS : 97-77-8)	TWA: 2 mg/m ³	STEL: 20 mg/m ³ TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³ STEL: 4 mg/m ³	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Tetraethyl thiuram disulfide (CAS : 97-77-8)	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³ STEL: 6 mg/m ³	TWA: 2 mg/m ³ STEL: 16 mg/m ³	-

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
Tetraethyl thiuram disulfide (CAS : 97-77-8)	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Tetraethyl thiuram disulfide (CAS : 97-77-8)	TWA: 2 mg/m ³ STEL: 2 mg/m ³	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³

Derived No Effect Level (DNEL):

Workers:

Inhalation - Systemic effects - Long term exposure: 0.146 mg/m³

Dermal - Systemic effects - Long term exposure: 0.592 mg/kg bw/day

Predicted No Effect Concentration (PNEL):

Fresh Water	0.00046 mg/L
Marine Water	0.000046 mg/L
Intermittent Release to Water	0.00067 mg/L
Sediment (freshwater)	0.047 mg/kg sediment dw
Sediment (marine water)	0.0047 mg/kg sediment dw
Soil	0.00912 mg/kg soil dw
STP	0.0311 mg/L

Exposure controls

Engineering controls:

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Personal protective equipment:

Wear safety glasses with side shields (or goggles). Wear protective gloves. Glove material: Nitrile rubber; Glove thickness: 0.11 mm; Break through time: > 480 min.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Recommended Filter type: Filter P 2 for solid and liquid particles of harmful substances.

Thermal hazard: No additional 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, crystal; pellet	Melting Point/Range: 71.5°C
Color: Light yellow	Boiling Point/Range: 117°C
Odor: No information available	Odor threshold: Not determined
pH: Not determined	Flash point: Not applicable
Vapor Pressure: 0.00002 Pa (25°C)	Flammability: Not flammable
Density at 20 °C: 1.3 g/cm ³	Ignition temperature: Not applicable
Relative density: Not applicable	Decomposition temperature: Not determined
Solubility: Water: 4.09mg/L	Partition coefficient (n-octanol/water): 3.6 (21°C)
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:	Violent reactions possible with: Strong oxidizing agents. A risk of explosion and/or of toxic gas formation exists with the following substances: nitrites, nitrous acid. During the vulcanization process, traces of carcinogenic N-nitrosamines may be formed from decomposition Products.
Conditions to avoid:	Heat, flames and sparks. Incompatible materials.
Incompatible materials:	Strong oxidizing agents, strong acids.
Hazardous decomposition products:	Hydrogen cyanide (HCN), sulfur oxides (SO _x), nitrogen oxides (NO _x).

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Harmful if swallowed.

Tetraethyl thiuram disulfide (CAS #: 97-77-8)	
LD50 oral rat	500 mg/kg
LD50 dermal rabbit	> 2,000 mg/kg OECD 402
LC50 inhalation rat	5.45 mg/L/4h

Skin corrosion/irritation:	No adverse effect observed (not irritating).
Serious eye damage:	No adverse effect observed (not irritating).
Sensitization:	Adverse effect observed (sensitizing). May cause an allergic skin reaction.
Germ cell mutagenicity:	Negative.
Carcinogenicity:	Not classified. Oral: NOAEL = 12.5 mg/kg bw/day. IARC Group 3 - Not classifiable as to its carcinogenicity to humans.
Reproductive toxicity:	Effects on fertility: Oral: NOAEL = 11.1 mg/kg bw/day. Developmental toxicity: Oral: NOAEL = 18.5 mg/kg bw/day
STOT single exposure:	Not classified

STOT multiple exposure:

Oral - systemic effects: NOAEL = 1.04 mg/kg bw/day (chronic; dog)
 Dermal - systemic effects: NOAEL = 10.4 mg/kg bw/day (chronic; dog)
 Inhalation - systemic effects: NOAEC = 1.82 mg/m³ (chronic; dog)
 May cause damage to organs (liver, nervous system) through prolonged or repeated exposure (oral).

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 information available

12. ECOLOGICAL INFORMATION

Toxicity

Very toxic to aquatic life with long lasting effects.

Tetraethyl thiuram disulfide (CAS #: 97-77-8)	
LC50 96h - fish	0.067 mg/L (<i>Lepomis macrochirus</i>)
EC50 48h - Crustacea	0.15 mg/l <i>Daphnia magna</i>
EC50 72h - Algae	0.49 mg/L (<i>Pseudokirchneriella subcapitata</i>)
NOEC- Fish	4.6 µg/L (<i>Pimephales promelas</i>)
NOEC- Crustacea	40 µg/L (<i>Daphnia magna</i>)

Persistence and degradability

Disulfiram is considered as not readily biodegradable.

Bioaccumulative potential

Partition coefficient (LogPow): 3.6 (21°C)

Bioaccumulation (BCF) : 225

Mobility in soil

Log Koc = 3.3 (sandy loam) to 4.4 (loamy sand) L/kg.

Results of PBT and vPvB assessment

The substance is not PBT/vPvB.

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 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 proper shipping name

DOT

Not Regulated

ADR, IMDG, IATA

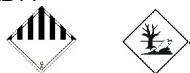
3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetraethyl thiuram disulfide)

Transport hazard class(es)

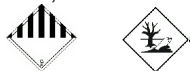
DOT

Not Regulated

ADR



IMDG, IATA



9: Miscellaneous dangerous substances and articles.
Label: 9

9 Miscellaneous dangerous substances and articles.
Label: 9

Packing group

DOT

N/A

ADR, IMDG, IATA

III

Environmental hazards

Marine pollutant

Yes

Symbol (fish and tree)

Special marking (ADR)

Symbol (fish and tree)

Special marking (IATA)

Symbol (fish and tree)

Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

Danger code (Kemler)

90

EMS Number

F-A,S-F

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 N.O.S. (Tetraethyl thiuram disulfide)

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)	Listed
TLV (Threshold Limit Value established by ACGIH)	Listed
NIOSH-Ca (National Institute for Occupational Safety and Health)	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%)	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