

# **SAFETY DATA SHEET**

Revision Date 30-March-2024 Revision Number 3

1. Identification

Product Name Manganese(IV) telluride

Cat No.: 13134

CAS-No 12032-89-2

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

**Emergency Telephone Number** 

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity Category 4

Label Elements

Signal Word

Warning

**Hazard Statements** 

Harmful if swallowed



### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

#### Response

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell

Rinse mouth

**Disposal** 

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

| Component                   | CAS-No     | Weight % |
|-----------------------------|------------|----------|
| Manganese telluride (MnTe2) | 12032-89-2 | <=100    |

## 4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Not combustible.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available

Revision Date 30-March-2024

#### Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Tellurium oxide. Manganese oxides.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2      | 0            | 0           | · -              |

#### 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional Ecological

Information. Do not allow material to contaminate ground water system. Do not flush into

surface water or sanitary sewer system.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed **Up** containers for disposal.

# 7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

#### **Exposure Guidelines**

| Component           | Alberta                       | British<br>Columbia        | Ontario TWAEV              | Quebec                     | ACGIH TLV        | OSHA PEL                     | NIOSH                      |
|---------------------|-------------------------------|----------------------------|----------------------------|----------------------------|------------------|------------------------------|----------------------------|
| Manganese telluride | T\//Δ · 0 1 mg/m <sup>3</sup> |                            | TWA: 0.1 mg/m <sup>3</sup> | TMA: 0.2 mg/m3             | T\Λ/Δ: 0.1 ma/m3 | (Vacated) TWA:               | IDLH: 500                  |
| "                   |                               |                            |                            |                            |                  | ,                            |                            |
| (MnTe2)             | TWA: 0.2 mg/m <sup>3</sup>    | TWA: 0.2 mg/m <sup>3</sup> | TWA: 0.02                  | TWA: 0.1 mg/m <sup>3</sup> | TWA: 0.02        | 0.1 mg/m <sup>3</sup>        | mg/m³ IDLH: 25             |
|                     |                               | TWA: 0.02                  | mg/m³                      |                            | mg/m³            | (Vacated)                    | mg/m³                      |
|                     |                               | mg/m³                      |                            |                            |                  | Ceiling: 5 mg/m <sup>3</sup> | TWA: 1 mg/m <sup>3</sup>   |
|                     |                               |                            |                            |                            |                  | Ceiling: 5 mg/m <sup>3</sup> | TWA: 0.1 mg/m <sup>3</sup> |
|                     |                               |                            |                            |                            |                  |                              | STEL: 3 mg/m <sup>3</sup>  |

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** None under normal use conditions.

#### Personal protective equipment

**Eye Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Hand Protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

| Glove material | Breakthrough time | Glove thickness | Glove comments         |
|----------------|-------------------|-----------------|------------------------|
| Natural rubber | See manufacturers | -               | Splash protection only |
| Nitrile rubber | recommendations   |                 |                        |
| Neoprene       |                   |                 |                        |
| PVC            |                   |                 |                        |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter

#### **Environmental exposure controls**

No information available.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

Physical State Solid Pieces

Appearance No information available

**Odor** Odorless

Odor Threshold

pH

No information available
No information available

Melting Point/Range
No data available
Boiling Point/Range
No information available
No information available

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid, gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data available

Vapor Pressure No information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

Autoignition Temperature

No information available

No information available

No information available

Viscosity Not applicable

Molecular Formula MnTe2
Molecular Weight 310.14

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Tellurium oxide, Manganese oxides

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

Product Information Component Information Toxicologically Synergistic

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No information available

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component           | CAS-No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---------------------|------------|------------|------------|------------|------------|------------|
| Manganese telluride | 12032-89-2 | Not listed |
| (MnTe2)             |            |            |            |            |            |            |

Mutagenic Effects No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity** 

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

### 13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

|                    | 14. Transport information  |  |  |  |  |  |  |
|--------------------|----------------------------|--|--|--|--|--|--|
| DOT<br>TDG<br>IATA | Not regulated              |  |  |  |  |  |  |
| TDG                | Not regulated              |  |  |  |  |  |  |
| <u>IATA</u>        | Not regulated              |  |  |  |  |  |  |
| IMDG/IMO_          | Not regulated              |  |  |  |  |  |  |
|                    | 15. Regulatory information |  |  |  |  |  |  |

#### International Inventories

|   | Component                  | CAS-No     | DSL | NDSL | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | EINECS    | ELINCS | NLP |
|---|----------------------------|------------|-----|------|------|---|-----------|--------|-----|
| M | anganese telluride (MnTe2) | 12032-89-2 | -   | Х    | X    | ACTIVE  | 234-783-7 | ı      | -   |

| Component                   | CAS-No     | IECSC | KECL     | ENCS | ISHL | TCSI | AICS | NZIoC | PICCS |
|-----------------------------|------------|-------|----------|------|------|------|------|-------|-------|
| Manganese telluride (MnTe2) | 12032-89-2 | -     | KE-23022 | -    | -    | -    | -    | -     | -     |

#### Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

| Component                   | Canada - National Pollutant<br>Release Inventory (NPRI) | Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances | Canada's Chemicals Management<br>Plan (CEPA) |
|-----------------------------|---|--|--|
| Manganese telluride (MnTe2) | Part 1, Group A Substance                               |  |  |

#### **Other International Regulations**

#### Authorisation/Restrictions according to EU REACH

| Component                   | . , | REACH (1907/2006) - Annex XVII -<br>Restrictions on Certain Dangerous<br>Substances |   |
|-----------------------------|-----|---|---|
| Manganese telluride (MnTe2) | -   | Use restricted. See item 75. (see link for restriction details)                     | - |

#### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

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

|   | Component                   | CAS-No     | OECD HPV       | Persistent Organic<br>Pollutant | Ozone Depletion<br>Potential | Restriction of<br>Hazardous<br>Substances (RoHS) |
|---|-----------------------------|------------|----------------|---------------------------------|------------------------------|--|
| Ī | Manganese telluride (MnTe2) | 12032-89-2 | Not applicable | Not applicable                  | Not applicable               | Not applicable                                   |

Revision Date 30-March-2024

| Component                   | CAS-No     | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Major Accident<br>Notification | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Safety Report<br>Requirements | Rotterdam<br>Convention (PIC) | Basel Convention<br>(Hazardous Waste) |
|-----------------------------|------------|---|--|-------------------------------|---------------------------------------|
| Manganese telluride (MnTe2) | 12032-89-2 | Not applicable  | Not applicable   | Not applicable                | Annex I - Y28                         |

## 16. Other information

Prepared By Product Safety Department

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www.thermofisher.com

Revision Date 30-March-2024 Print Date 30-March-2024

**Revision Summary** New emergency telephone response service provider.

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**