

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Revision Date 24-Jan-2024

Revision Number 3

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

| Product Description: Cat No. : Synonyms CAS No Molecular Formula REACH registration number | <u>Tellurium(IV) chloride</u> 12284 Tellurium tetrachloride; Tellurium chloride, (T-4)-; Telluric chloride 10026-07-0 Cl4 Te - |
|---|---|
| 1.2. Relevant identified uses of the | substance or mixture and uses advised against |
| Recommended Use Uses advised against | Laboratory chemicals. No Information available |
| 1.3. Details of the supplier of the sa | afety data sheet |
| Company | Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608 |
| E-mail address | begel.sdsdesk@thermofisher.com |
| 1.4. 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 |

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

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Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P280 - Wear eye protection/ face protection
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

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Component | CAS No | EC No | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|-------------------------|------------|-------------------|----------|---|
| Tellurium tetrachloride | 10026-07-0 | EEC No. 233-055-6 | 99 | Skin Corr. 1B (H314) |

REACH registration number

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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Category 1 B (H314) Category 1 (H318)

| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. |
|------------------------------------|---|
| Ingestion | Do NOT induce vomiting. Call a physician immediately. |
| Inhalation | Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |
| 4.2. Most important symptoms and | l effects, both acute and delayed |
| | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| 4.3. Indication of any immediate m | edical attention and special treatment needed |

Notes to Physician

Tellurium(IV) chloride

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Hydrogen chloride gas.

5.3. Advice for firefighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation.

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.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 8B Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

| Component | The United Kingdom | European Union | Ireland |
|-------------------------|------------------------------------|----------------|---------|
| Tellurium tetrachloride | STEL: 0.3 mg/m ³ 15 min | | |
| | TWA: 0.1 mg/m ³ 8 hr | | |

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures

Tellurium(IV) chloride

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

| Eye Protection | | (European standard | I - EN 166) | |
|--|---|----------------------|-----------------------|---|
| Hand Protection | Protectiv | ve gloves | | |
| Glove material Natural rubber Nitrile rubber Neoprene | Breakthrough time See manufacturers recommendations | Glove thickness - | EU standard EN 374 | Glove comments (minimum requirement) |

Inspect gloves before use.

Skin and body protection

PVC

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Wear appropriate protective gloves and clothing to prevent skin exposure.

Remove gloves with care avoiding skin contamination.

| Respiratory Protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly |
|----------------------------|--|
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particulates filter conforming to EN 143 |
| Small scale/Laboratory use | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted |

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical State | Powder Solid |
|--|---|
| Appearance | Off-white |
| Odor | Odorless |
| Odor Threshold | No data available |
| Making Baint/Banga | 224 °C / 435.2 °F |
| Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits | No data available 380 °C / 716 °F Not applicable No information available No data available |
| Flash Point | No information available |
| Autoignition Temperature | No data available |
| Decomposition Temperature | No data available |
| pH | No information available |
| Viscosity | Not applicable |

MAY DECOMPOSE

Water Solubility

@ 760 mmHg Solid

Method - No information available

Solid

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Tellurium(IV) chloride

| Solubility in other solvents | No information available |
|---------------------------------------|--------------------------|
| Partition Coefficient (n-octanol/wate | er) |
| Vapor Pressure | No information available |
| Density / Specific Gravity | 3.260 |
| Bulk Density | No data available |
| Vapor Density | Not applicable |
| Particle characteristics | No data available |
| | |
| | |

Solid

9.2. Other information

| Molecular Formula | Cl4 Te |
|-------------------|------------------------|
| Molecular Weight | 269.4 |
| Evaporation Rate | Not applicable - Solid |

SECTION 10: STABILITY AND REACTIVITY

| known, based on information available |
|--|
| le under normal conditions. Hygroscopic. |
| |
| formation available. formation available. |
| npatible products. |
| ng oxidizing agents. |
| |

10.6. Hazardous decomposition products

Hydrogen chloride gas.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| Product Information | No acute toxicity information is available for this product |
|--|---|
| (a) acute toxicity; Oral Dermal Inhalation | No data available No data available No data available |
| (b) skin corrosion/irritation; | Category 1 B |
| (c) serious eye damage/irritation; | Category 1 |
| (d) respiratory or skin sensitization Respiratory Skin | ; No data available No data available |

(e) germ cell mutagenicity; No data available

| (f) carcinogenicity; | No data available There are no known carcinogenic chemicals in this product |
|--|--|
| (g) reproductive toxicity; | No data available |
| (h) STOT-single exposure; | No data available |
| (i) STOT-repeated exposure; | No data available |
| Target Organs | No information available. |
| (j) aspiration hazard; | Not applicable Solid |
| Other Adverse Effects | The toxicological properties have not been fully investigated. |
| Symptoms / effects,both acute and delayed | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. |
| 11.2. Information on other hazards | |
| Endocrine Disrupting Properties | Assess endocrine disrupting properties for human health. This product does not contain any |
| | known or suspected endocrine disruptors. |
| SE | ECTION 12: ECOLOGICAL INFORMATION |
| 12.1. Toxicity Ecotoxicity effects | · · · · |
| <u>12.1. Toxicity</u> | ECTION 12: ECOLOGICAL INFORMATION |
| 12.1. Toxicity Ecotoxicity effects 12.2. Persistence and degradability Persistence | Do not empty into drains. |
| <u>12.1. Toxicity</u> Ecotoxicity effects <u>12.2. Persistence and degradability</u> Persistence Degradability | ECTION 12: ECOLOGICAL INFORMATION Do not empty into drains. Soluble in water, Persistence is unlikely, based on information available. Not relevant for inorganic substances. |
| 12.1. Toxicity Ecotoxicity effects 12.2. Persistence and degradability Persistence Degradability 12.3. Bioaccumulative potential | CTION 12: ECOLOGICAL INFORMATION Do not empty into drains. Soluble in water, Persistence is unlikely, based on information available. Not relevant for inorganic substances. Bioaccumulation is unlikely The product is water soluble, and may spread in water systems. Will likely be mobile in the |

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Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

| Waste from Residues/Unused Products | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
|--|---|
| Contaminated Packaging | Dispose of this container to hazardous or special waste collection point. |
| European Waste Catalogue (EWC) | According to the European Waste Catalog, Waste Codes are not product specific, but application specific. |
| Other Information | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms. |

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> Technical Shipping Name <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | UN3260 Corrosive solid, acidic, inorganic, n.o.s. Tellurium(IV) chloride 8 II |
|--|--|
| ADR | |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> Technical Shipping Name <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | UN3260 Corrosive solid, acidic, inorganic, n.o.s. Tellurium(IV) chloride 8 II |
| IATA | |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> Technical Shipping Name <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.* Tellurium(IV) chloride 8 II |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required. |
| 14.7. Maritime transport in bulk according to IMO instruments | Not applicable, packaged goods |

SECTION 15: REGULATORY INFORMATION

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

Tellurium(IV) chloride

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|-------------------------|------------|-----------|--------------------|---------|-------|------|----------|-------|-------|
| Tellurium tetrachloride | 10026-07-0 | 233-055-6 | - | - | - | Х | KE-33101 | - | - |
| | | | | | | | | | |
| Component | CAS No | TSCA | TSCA In notific | | DSL | NDSL | AICS | NZIoC | PICCS |
| | | | Active- | nactive | | | | | |
| Tellurium tetrachloride | 10026-07-0 | Х | ACT | IVE | - | Х | Х | Х | - |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | , <u> </u> | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-------------------------|------------|---|--|---|
| Tellurium tetrachloride | 10026-07-0 | - | Use restricted. See item 75. (see link for restriction details) | - |

REACH links

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

Seveso III Directive (2012/18/EC)

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report |
|-------------------------|------------|---|--|
| | | Notification | Requirements |
| Tellurium tetrachloride | 10026-07-0 | Not applicable | Not applicable |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification Water endangering class = 3 (self classification)

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A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

Legend

| CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory INDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals |
|---|--|
| WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic | TWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC) LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor Key literature references and sources for data | ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound) |

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

| Prepared By | Health, Safety and Environmental Department |
|------------------|--|
| Revision Date | 24-Jan-2024 |
| Revision Summary | New emergency telephone response service provider. |

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

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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 Safety Data Sheet