

SAFETY DATA SHEET
TIN DICHLORIDE

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the use and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with the REACH Regulation (EC) No 1907/2006, and described in CLP regulation (EC) No 1272/2008.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|----------------------------------|--|
| Product name | TIN DICHLORIDE |
| Internal identification | S1012, S1014 |
| Synonyms; trade names | TIN (II) CHLORIDE, STANNOUS CHLORIDE ANHYDROUS |
| Container size | 25 kgs |
| REACH registration number | 01-2119971277-28-0001 |
| CAS number | 7772-99-8 |
| EC number | 231-868-0 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|-----------------------------|---|
| Identified uses | Formulation of mixtures. Use in electrolytic and electroless tinning processes. Textiles. Catalyst applications. Radionuclide angiography. Intermediate. Use in production of rubber, plastics and other materials. Food additives. Cement. Imaging & printing chemicals. A complete list of identified uses is shown in the Annex to this SDS. |
| Uses advised against | Water treatment apart from regulated use in corrosion inhibition. |

1.3. Details of the supplier of the safety data sheet

| | |
|-----------------|---|
| Supplier | William Blythe Ltd Church Accrington Lancashire BB5 4PD UK. TEL. +44 (0)1254 320000 FAX. +44 (0)1254 320001 contactus@williamblythe.com |
|-----------------|---|

| | |
|-----------------------|---|
| Contact person | S Barker (steve.barker@williamblythe.com), Safety Health & Environment Manager. |
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1.4. Emergency telephone number

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|--|---|
| Emergency telephone | For specialist advice contact William Blythe Ltd on +44 (0) 1254 320000, available 24 hours a day, 7 days a week. |
| National emergency telephone number | Contact the National Chemical Emergency Centre: +44 (0)870 190 6777 - available 24 hours, 7 days a week |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

TIN DICHLORIDE

| | |
|------------------------------|--|
| Physical hazards | Met. Corr. 1 - H290 |
| Health hazards | Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335 STOT RE 2 - H373 |
| Environmental hazards | Aquatic Chronic 3 - H412 |

Classification (67/548/EEC or 1999/45/EC) Xn: R20/22, R43, R48/22 C: R34. N; R50/53.

2.2. Label elements

EC number 231-868-0

Pictogram



Signal word

Danger

Hazard statements

H290 May be corrosive to metals.
 H302+H332 Harmful if swallowed or if inhaled.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs (Blood, Heart & cardiovascular system) through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 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/ doctor.

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| Supplementary precautionary statements | <p>P234 Keep only in original container.</p> <p>P261 Avoid breathing dust.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P390 Absorb spillage to prevent material damage.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P406 Store in corrosive resistant container with a resistant inner liner.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> |
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2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

| | |
|----------------------------------|-------------------------|
| Product name | TIN DICHLORIDE |
| REACH registration number | 01-2119971277-28-0001 |
| CAS number | 7772-99-8 |
| EC number | 231-868-0 |
| Chemical formula | SnCl ₂ |
| Composition comments | Substance is inorganic. |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------------------|---|
| General information | <p>First aid personnel should wear appropriate protective equipment during any rescue. Immediate first aid is imperative. Keep affected person under observation. Treat symptomatically. Chemical burns must be treated by a physician. Show this Safety Data Sheet to the medical personnel.</p> |
| Inhalation | <p>Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.</p> |
| Ingestion | <p>Remove affected person from source of contamination. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Give a few small glasses of water or milk to drink. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.</p> |

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Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing. Show this Safety Data Sheet to the medical personnel.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention. Show this Safety Data Sheet to the medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation Severe irritation of nose and throat.

Ingestion Will cause chemical burns to mouth, throat and gastrointestinal tract May cause stomach pain or vomiting.

Skin contact Causes severe burns.

Eye contact Causes burns. Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is non-combustible. Extinguish with the following media: Water spray, foam, dry powder or carbon dioxide. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media None known

5.2. Special hazards arising from the substance or mixture

Specific hazards Corrosive gases or vapours.

Hazardous combustion products Hydrogen chloride (HCl). Oxides of: Tin.

5.3. Advice for firefighters

Protective actions during firefighting Keep up-wind to avoid fumes. Avoid breathing fire gases or vapours. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Wear chemical protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Avoid inhalation of dust and vapours. Avoid contact with skin, eyes and clothing. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Ensure procedures and training for emergency decontamination and disposal are in place. Follow precautions for safe handling described in this safety data sheet. No action shall be taken without appropriate training or involving any personal risk.

For non-emergency personnel Evacuate area.

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6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid spreading dust or contaminated materials. Avoid or minimise the creation of any environmental contamination. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up GENERAL. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid generation and spreading of dust. Wash thoroughly after dealing with a spillage. Small Spillages: <10 kgs Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Flush away spillage with plenty of water. Large Spillages: >10 kgs If leakage cannot be stopped, evacuate area. Inform authorities if large amounts are involved. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. If involved in a fire, shut off flow if it can be done without risk. Dispose of waste via a licensed waste disposal contractor.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust and contact with skin and eyes. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Eye wash facilities and emergency shower must be available when handling this product. Mechanical ventilation or local exhaust ventilation may be required. Avoid release to the environment.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash contaminated skin thoroughly after handling. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Suitable container materials: Polyethylene. Polyvinyl chloride (PVC). Unsuitable container materials: Common metals. Store away from the following materials: Oxidising materials. Alkalis. Organic salts.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) For further information, see attached Exposure Scenario.

TIN DICHLORIDE

Usage description

For further information see the Exposure Scenarios for identified uses shown in the Annex to this SDS. These include human health & environmental exposure risk management measures.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 2 as Sn mg/m³ dust

Short-term exposure limit (15-minute): WEL 4 as Sn mg/m³ dust

WEL = Workplace Exposure Limit

DNEL

Workers - Inhalation; Long term systemic effects: 8 as Sn mg/m³

Workers - Inhalation; Short term systemic effects: 8 as Sn mg/m³

Workers - Dermal; Long term systemic effects: 0.11 as Sn mg/kg/day

Workers - Dermal; Short term systemic effects: 0.11 as Sn mg/kg/day

Workers - Dermal; Long term local effects: 8 as Sn mg/cm²

Workers - Dermal; Short term local effects: 8 as Sn mg/cm²

General population - Inhalation; Short term local effects: 0.023 as Sn mg/kg/day

General population - Oral; Long term systemic effects: 0.00619 as Sn mg/kg/day

General population - Inhalation; Short term systemic effects: 1.6 as Sn mg/m³

General population - Dermal; Short term systemic effects: 0.028 as Sn mg/kg/day

General population - Dermal; Short term local effects: 1.6 as Sn mg/cm²

General population - Oral; Short term systemic effects: 5.97 as Sn mg/kg/day

DMEL

General population - Inhalation; Long term local effects: 1.6 as Sn mg/m³

General population - Inhalation; Long term systemic effects: 1.6 as Sn mg/m³

General population - Dermal; Long term systemic effects: 0.023 as Sn mg/kg/day

General population - Dermal; Long term local effects: 1.6 as Sn mg/cm²

PNEC

- Fresh water; 0.003 mg/l

- Marine water; 0.035 mg/l

- Intermittent release; 0.005 mg/l

- STP; 1.04 mg/l

- Sediment (Freshwater); 58 mg/kg

- Sediment (Marinewater); 5.8 mg/kg

- Soil; 0.068 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC).

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Wear appropriate clothing to prevent any possibility of skin contact.

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| Hygiene measures | Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Contaminated clothing should be placed in a closed container for disposal or decontamination. Warn cleaning personnel of any hazardous properties of the product. When using do not eat, drink or smoke. |
| Respiratory protection | If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Particulate filter, type P2. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

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|---|---|
| Appearance | Powder. |
| Colour | White/off-white. |
| Odour | Slight. |
| Odour threshold | Not determined. |
| pH | pH (concentrated solution): <1 pH (diluted solution): <1 (5%) |
| Melting point | 247°C |
| Initial boiling point and range | 623°C @ 101.325 kPa |
| Flash point | Not applicable. |
| Evaporation rate | Not applicable. |
| Upper/lower flammability or explosive limits | Not applicable. |
| Vapour pressure | Not determined. |
| Vapour density | Not applicable. |
| Bulk density | ~ 1300 kg/m ³ |
| Solubility(ies) | 178 g/100 g water @ 10°C Soluble in water. |
| Partition coefficient | log Kow: ~ -2.15 |
| Auto-ignition temperature | Not applicable. |
| Decomposition Temperature | Not determined. |
| Viscosity | No information available. |
| Explosive properties | Not applicable. |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |
| Comments | Information given is applicable to the major ingredient. |

9.2. Other information

| | |
|-----------------------------|-----------------|
| Particle size | Not determined. |
| Molecular weight | 189.6 g/mol |
| Critical temperature | N/A°C |

SECTION 10: Stability and reactivity

10.1. Reactivity

TIN DICHLORIDE

Reactivity The following materials may react with the product: Strong oxidising agents. Metals. Alkalis. Organic salts.

10.2. Chemical stability

Stability Stable at normal ambient temperatures. The substance is hygroscopic and will absorb water by contact with the moisture in the air.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong alkalis. Powdered metal. Organic salts.

10.6. Hazardous decomposition products

Hazardous decomposition products Heating may generate the following products: Toxic and corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Corrosive to skin and eyes. May cause an allergic skin reaction. Harmful by inhalation. Dust may irritate the respiratory system. May cause damage to organs through prolonged or repeated exposure if swallowed.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,910.0

Species Rat

Notes (oral LD₅₀) REACH dossier information: Test method: Equivalent or similar to OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) Test material: Tin Dichloride Dihydrate Harmful if swallowed.

ATE oral (mg/kg) 1,910.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Endpoint waived according to REACH Annex VII, IX or XI. Technical impossibility to obtain the data. Corrosive to skin. Causes burns.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Read across data. Test substance: Stannous Oxalate Harmful if inhaled.

ATE inhalation (dusts/mists mg/l) 1.5

Skin corrosion/irritation

Animal data Test substance: Tin Dichloride Corrosive to skin.

Extreme pH ≤ 2

Serious eye damage/irritation

Serious eye damage/irritation Endpoint waived according to REACH Annex VII, IX or XI. Causes severe skin burns and eye damage.

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Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Read across data. Test substance: Stannous Sulphate. Patch test Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro OECD 487. In vitro mammalian cell micronucleus test. Test substance: Tin Dichloride
Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Dose level: 2 ppm, Oral, Rat No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility Read across data. Tin and Tin Dichloride Three-generation study - NOEL >800 ppm, Oral, Rat F2b No teratogenic effects. Based on available data the classification criteria are not met.

Reproductive toxicity - development Test substance: Tin Dichloride Teratogenicity: >41.5mg/kg/bw, oral, rabbit. No discernible effect on foetal survival. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure On basis of test data. May cause respiratory irritation.

Target organs Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 39 mg/kg/day, Oral, Rat Read across data. Test substance: Stannous Chloride Dihydrate May cause damage to organs through prolonged or repeated exposure if swallowed.

Target organs Blood Heart and cardiovascular system

Aspiration hazard

Aspiration hazard Not determined.

Toxicokinetics

Test studies indicate low bioaccumulation of Tin²⁺ salts

Inhalation

Harmful by inhalation.

Ingestion

Harmful if swallowed. May cause burns in mucous membranes, throat, oesophagus and stomach.

Skin contact

Corrosive. Causes severe burns.

Eye contact

Causes severe burns. Causes serious eye damage.

Acute and chronic health hazards

May cause skin sensitisation or allergic reactions in sensitive individuals. May cause damage to organs if swallowed.

Route of entry

Ingestion. Skin absorption Inhalation Skin and/or eye contact

Target organs

Eyes Skin Respiratory system, lungs Blood Heart and cardiovascular system

SECTION 12: Ecological Information

12.1. Toxicity

TIN DICHLORIDE

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| Toxicity | The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. |
| Acute toxicity - fish | Read across data. Test substance: Stannous Sulphate. LC ₅₀ , 96 hour: 10.19 as Sn mg/l, Freshwater fish |
| Acute toxicity - aquatic invertebrates | LC ₅₀ , 96 hours: 50 mg/l, Crangon septemspinosa |
| Acute toxicity - aquatic plants | EC ₅₀ , 48 hours: 50 as Sn mg/l, Freshwater algae |
| Acute toxicity - microorganisms | EC10, (as stannous sulfate) : 1.04 ug/L, Pseudomonas putida EC ₅₀ , (as stannous sulfate) : 2.33 ug/L, Pseudomonas putida |
| Chronic toxicity - aquatic invertebrates | NOEC, 21 days: 0.18 as Sn mg/l, Daphnia magna |
| Toxicity to soil | NOEC, 9 days: 6.8 mg/kg, Soil micro-organisms |
| Toxicity to terrestrial plants | NOEC, : 5 as Sn mg/kg, |

12.2. Persistence and degradability

| | |
|--------------------------------------|---|
| Persistence and degradability | The product contains inorganic substances which are not biodegradable. |
| Phototransformation | No information available. |
| Stability (hydrolysis) | Tin (2+) can be hydrolyzed into Tin hydroxides, the majority of which is Sn(OH) ₂ . In alkaline conditions (pH>8) Tin (2+) is oxidized to Sn (4+). |
| Biodegradation | Water - Half-life 80%: ~ 9.5 days Biodegradation as used for organic substances does not apply to inorganic substances. |

12.3. Bioaccumulative potential

| | |
|----------------------------------|--|
| Bioaccumulative potential | BCF: ~ 6.41, Mussels The product is not bioaccumulating. |
| Partition coefficient | log Kow: ~ -2.15 |

12.4. Mobility in soil

| | |
|--|---|
| Mobility | The product is water-soluble and may spread in water systems. |
| Adsorption/desorption coefficient | - Log Kp (solids-water in soil): ~ 3.28 @ °C |
| Surface tension | Hydrolyses in water Technically not feasible. |

12.5. Results of PBT and vPvB assessment

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|---|---|
| Results of PBT and vPvB assessment | The PBT and vPvB criteria of Annex XIII to the Regulation do not apply to inorganic substances. |
|---|---|

12.6. Other adverse effects

| | |
|------------------------------|-------------|
| Other adverse effects | None known. |
|------------------------------|-------------|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|----------------------------|--|
| General information | Only experts should be permitted to carry out disposal of this material. Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
|----------------------------|--|

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Disposal methods

Reuse or recycle products wherever possible. Product / Packaging disposal: Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Containers should be cleaned by appropriate method and then re-used or disposed by landfill or incineration as appropriate, in accordance with local and national regulations. Do not remove label until container is thoroughly cleaned. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1. UN number

| | |
|------------------|------|
| UN No. (ADR/RID) | 3260 |
| UN No. (IMDG) | 3260 |
| UN No. (ICAO) | 3260 |
| UN No. (ADN) | 3260 |

14.2. UN proper shipping name

| | |
|--------------------------------|--|
| Proper shipping name (ADR/RID) | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINS TIN DICHLORIDE) |
| Proper shipping name (IMDG) | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINS TIN DICHLORIDE) |
| Proper shipping name (ICAO) | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINS TIN DICHLORIDE) |
| Proper shipping name (ADN) | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (CONTAINS TIN DICHLORIDE) |

14.3. Transport hazard class(es)

| | |
|-----------------------------|----|
| ADR/RID class | 8 |
| ADR/RID classification code | C2 |
| ADR/RID label | 8 |
| IMDG class | 8 |
| ICAO class/division | 8 |
| ADN class | 8 |

Transport labels



14.4. Packing group

| | |
|-----------------------|-----|
| ADR/RID packing group | III |
| IMDG packing group | III |
| ADN packing group | III |
| ICAO packing group | III |

14.5. Environmental hazards

TIN DICHLORIDE

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 3

Emergency Action Code 2X

Hazard Identification Number 80
(ADR/RID)

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

TIN DICHLORIDE

Abbreviations and acronyms used in the safety data sheet

C.A.S. = Chemical Abstracts Service
 CLP = Classification, Packaging and Labelling
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 ECHA = European Chemicals Agency
 E.C. No = European Commission number
 GHS = Globally Harmonised System
 LD/LC/EC/IC50 = Lethal Dose, Lethal Concentration/Effect Concentration/Inhibition Concentration for 50% of population
 NOEC = No Overall Effect Concentration
 NOEL = No Overall Effect Level
 OECD = Organisation for Economic Co-operation & Development
 PBT = Persistent, Bioaccumulative and Toxic to Environment
 PNEC = Predicted No Effect Concentration
 REACH = Registration, Evaluation, Authorisation & Restriction of Chemicals
 STOT-RE = Single Target Organ Toxicity - Repeat Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 STP = Sewage Treatment Plant
 SVHC = Substance of Very High Concern
 vPvB = very persistent, very Bioaccumulative to Environment
 WEL = Work Exposure Limit

General information

Only trained personnel should use this material.

Key literature references and sources for data

Where a REACH registration dossier has been submitted to ECHA, information supplied in the Chemical Safety Report has been used in this Safety Data Sheet.

Training advice

Only trained personnel should use this material.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision. This Safety Data Sheet is a fully revised version to be compliant in accordance with the REACH Regulation (EC) No 1907/2006 and CLP Regulation (EC) No 1272/2008

Issued by

K Wright

Revision date

11/03/2019

Revision

5

Supersedes date

13/02/2017

SDS number

20507

SDS status

Approved.

Hazard statements in full

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs (Blood, Heart & cardiovascular system) through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.