

SAFETY DATA SHEET

in accordance with Regulation (EC) no. 1907/2006 (REACH)

MIXTURE OF TIN POWDER - ALUMINIUM OXIDE POWDER



Date of Issue: 23-08-2022

Date of Revision:

Powder Number: LPP.T-25

Version: 2.0

SECTION 1: Identification of The Substance or Mixture and The Company/Undertaking

1.1. Product identification

| | |
|---------------|----------|
| Product type: | Mixture |
| Product code: | LPP.T-25 |

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

1.2.1. Relevant identified uses

Specific industrial/professional use: Industrial For professional use only

1.2.2. Uses advised against

No additional information available.

1.3. Details regarding the supplier of the safety data sheet

Titomic Limited
info@titomic.com
www.titomic.com

1.4. Emergency telephone number

| Country | Organisation / Company | Address | Emergency tel. number |
|-----------------|---|-----------------------------------|-----------------------|
| THE NETHERLANDS | National Poisons Information Center (NVIC) University Medical Centre (UMC) Utrecht, The National Poisons Information Centre (NVIC) provides information for doctors, veterinary surgeons, pharmacists and other medical professionals about the potential health effects and treatment options in cases of poisoning. The NVIC can be reached 24 hours a day, both by telephone and Internet. | P.O. Box 85500 3508 GA Utrecht | +31 30 274 88 88 |

SECTION 2: Hazard Identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Harmful physical-chemical, health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Labelling not applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition of And Information About Ingredients

3.1. Substances

Not applicable

3.2. Mixture

| Name | Product identification | % | Classification as laid down in Directive 67/548/EEC |
|-------------------------------------|---|---------|---|
| Tin powder (99.0% pure) | (CAS no.) 7440-31-5 (EC no.) 231-141-8 (REACH no.) 01-2119486474-28 | 55 - 45 | Not classified |
| Aluminium oxide powder (99.4% pure) | (CAS no.) 1344-28-1 (EC no.) 215-691-6 (REACH no.) 01-2119529248-35 | 45 - 55 | Not classified |

| Name | Product identification | % | Classification according to Regulation (EC) no. 1272/2008 [CLP] |
|-------------------------|---|---------|---|
| Tin powder (99.0% pure) | (CAS no.) 7440-31-5 (EC no.) 231-141-8 (REACH no.) 01-2119486474-28 | 55 - 45 | Not classified |
| Zinc powder (96% pur) | (CAS no.) 1344-28-1 (EC no.) 215-691-6 (REACH no.) 01-2119529248-35 | 45 - 55 | Not classified |

For total content of R and H phrases: see section 16

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SECTION 4: First Aid Measures

4.1. Description of first aid measures

| | |
|---|--|
| General first aid: | Never give anything by mouth to an unconscious person. If a person feels unwell, consult a physician (show the relevant label if possible). |
| First aid following substance inhalation: | Allow victim to breathe fresh air. Allow victim to rest. In the event of a respiratory arrest, apply artificial respiration. |
| First aid following contact with skin: | Remove soiled clothing and wash or shower skin with plenty of water (for 15 minutes). Consult a physician if necessary. |
| First aid following contact with eyes: | Rinse immediately with plenty of water. Seek medical assistance if pain or redness persists. Lift eyelids using fingers and flush the eyes with plenty of water. |
| First aid following ingestion | Rinse the mouth thoroughly with water. DO NOT induce vomiting. Give patient, if conscious, plenty of water to drink. Never try to get an unconscious patient to drink. Seek medical assistance if any adverse effects develop. |

4.2. Main acute and delayed symptoms and effects

| | |
|--|---|
| Symptoms/injuries: | Not considered a serious hazard if used under normal circumstances. |
| Symptoms/injuries following inhalation: | Can cause irritation of the airways. Coughing. Shortness of breath. |
| Symptoms/injuries following contact with skin: | Prolonged or repeated contact of product with skin can eliminate the skin's natural oils. |
| Symptoms/injuries following contact with eyes: | May cause eye irritation. |
| Symptoms/injuries following ingestion: | Can cause irritation of the intestinal tract, nausea, vomiting and diarrhoea. |
| Chronic symptoms: | Repeated excessive exposure to dust may cause pneumoconiosis. |

4.3. Reporting the necessary immediate medical care and special treatment

Symptomatic treatment.

Section 5: Firefighting Measures

5.1. Extinguishing media

| | |
|---------------------------------|---|
| Suitable extinguishing media: | Dry chemicals. Water spray jet. Sand. soda ash. Lime. |
| Unsuitable extinguishing media: | Do not use a high-power water jet. |

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5.2. Special hazards arising from the substance or mixture

| | |
|-------------------|---|
| Fire hazard: | Not flammable. |
| Explosion hazard. | No immediate explosion hazard. Can form a flammable/explosive vapour-air mixture. |

5.3. Advice for firefighters

| | |
|---------------------------------|---|
| Extinguishing instructions: | Cool the exposed vessels by spraying with water or water mist. Exercise extreme caution when fighting a chemical fire. Avoid discharging fire extinguishing water into the environment. |
| Protection during firefighting: | Do not enter fire zone without suitable safety equipment/clothing, including protective breathing apparatus. |

SECTION 6: Measures to Be Taken in The Event of Accidental Release of The Substance or Mixture

6.1. Personal prevention measures, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

| | |
|-----------------------|-------------------------------------|
| Emergency procedures: | Evacuate personnel to a safe place. |
|-----------------------|-------------------------------------|

6.1.2. For emergency personnel

| | |
|-----------------------|--|
| Protective equipment: | Provide cleaning personnel with suitable protection. |
| Emergency procedures: | Ventilate the area. |

6.2. Environmental precautions

Do not discharge into sewage or public waters. If pollution of lakes, rivers or sewage occurs, inform the responsible authorities in accordance with local regulations.

6.3. Methods and materials for containment and cleaning

| | |
|------------------|--|
| Cleaning methods | Sweep or scrape from the ground into suitable containers. Keep dust formation to a minimum. Store separately from other materials. |
|------------------|--|

6.4. Reference to other sections

See section 8 for use of personal protection equipment. See section 13 for waste disposal after cleaning.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling of the substance or mixture

| | |
|--|--|
| Precautions for safe handling of the substance or mixture: | Wash hands and other exposed parts using gentle soap and water before eating, drinking, smoking or leaving the work environment. Make sure there is adequate ventilation in the handling area in order to prevent evaporation. |
| Hygienic measures | Wash soiled clothing before reusing. |

7.2. Safe storage conditions, including incompatible products

| | |
|--------------------------|---|
| Storage conditions: | Keep containers closed when not in use. Store in a cool, dry, well-ventilated area. |
| Incompatible substances: | 3.1. Substances |
| Incompatible substances: | Remove all sources of ignition. |

7.3. Specific end use(s)

industrial.

SECTION 8: Measures to Control Exposure/Personal Protection

8.1. Control parameters

| Tin powder (7440-31-5) | | |
|------------------------|---------------------------------|---------------------|
| CEE | IOELV TWA (mg/m ³) | 2 mg/m ³ |
| THE NETHERLANDS | MAC TGG 8H (mg/m ³) | 2 mg/m ³ |

8.2. Measures to control exposure

| | |
|----------------------------------|--|
| Suitable technical measures | Provide the area with local drainage/outlet or general ventilation. Keep away from sources of ignition. Emergency eye baths and safety showers should be installed in the vicinity of all exposure hazard areas. |
| Personal protective equipment: | Avoid unnecessary exposure. Wear mask in presence of dust. Gloves. Safety goggles. |
| Hand protection: | The manufacturer can provide the exact penetration time; bear this in mind at all times. Standard EN 374 - Gloves for protection against chemicals. The choice of suitable gloves depends not only on the material, but also on other quality characteristics, and varies from one manufacturer to another. Select glove material according to penetration times, rates of diffusion and the degradation. As a result of failed tests, no recommendation for glove material can be given for the product/ the preparation/ the chemical mixture. |
| Eye protection: | Use protective eyewear that meets EN 166 requirements and which is designed to protect against dust particles. |
| Protection for the skin and body | Use suitable safety clothing/equipment. |
| Respiratory protection | In the event of dust formation, use a respirator with filter. Make sure the area has local drainage or general ventilation in order to keep exposure to substance/dust to a minimum. |
| Other information | Do not eat, drink or smoke during use. |

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SECTION 9: Physical and Chemical Properties.

9.1. Information about basic physical and chemical properties

| | |
|--|--------------------------|
| Physical state: | Solid |
| Appearance: | Powder |
| Colour: | Silver grey |
| Odour: | Odourless |
| Odour threshold: | No data available |
| pH: | No data available |
| Relative evaporation rate (butyl acetate=1): | No data available |
| Melting point: | No data available |
| Coagulation/freezing point: | No data available |
| Boiling point: | No data available |
| Flash point: | No data available |
| Auto-ignition temperature: | No data available |
| Thermolysis temperature: | No data available |
| Flammability (solid, gas): | Not flammable |
| Vapour pressure: | No data available |
| Relative vapour density at 20 °C: | No data available |
| Relative density: | No data available |
| Solubility: | Product soluble in water |
| Log Pow: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | No data available |
| Explosive properties: | No data available |
| Oxidising properties: | No data available |
| Explosion points: | No data available |

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9.2. Other information

No additional information available

ABSCHNITT 10: Stabilität und Reaktivität

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at room temperature and with normal use.

10.3. Potentially hazardous reactions

Hazardous polymerisation: None.

10.4. Conditions to avoid

Extremely high or low temperatures. Keep out of direct sunlight. hoge vochtigheid. hitte.

10.5. Chemically incompatible materials

Halogen. Oxidizing agents. Strong acids. sterke basen. Alkaline metals.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

| | |
|---|---|
| Acute toxicity: | Not classified |
| Irritation: | Not classified |
| Corrosiveness: | Not classified |
| Sensitisation: | Not classified |
| Toxicity on repeated administration: | Not classified |
| Carcinogenicity: | Not classified |
| Germ cell mutagenicity: | Not classified |
| Reproduction toxicity: | Not classified |
| Potential hazardous effects on human health and potential symptoms: | Classification criteria are not met based on available data |

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SECTION 12: Ecological Information

12.1. Toxicity

Tin powder (7440-31-5)

| | |
|----------------|--|
| LC50 | 0.42 mg/l (672 h; Salmogairdneri (Oncorhynchus mykiss); Metaalion) |
| EC50 Daphnia 1 | 1.5 mg/l (504 h; Daphnia magna) |

12.2. Persistence and degradability

Mixture of Tin powder - Aluminium oxide powder

| | |
|-------------------------------|----------------|
| Persistence and degradability | Not classified |
|-------------------------------|----------------|

Tin powder (7440-31-5)

| | |
|---------------------------------|---|
| Persistence and degradability | Organic degradability: not applicable. Adsorbs into soil. |
| Biochemical oxygen uptake (BZV) | Not applicable |
| Biochemical oxygen uptake (BZV) | Not applicable |
| ThOD | Not applicable |
| BZV (% of ThOD) | Not applicable |

Aluminium oxide powder (1344-28-1)

| | |
|-------------------------------|---|
| Persistence and degradability | Organic degradability: not applicable. Adsorbs into soil. |
|-------------------------------|---|

12.3. Bioaccumulation

Mixture of Tin powder - Aluminium oxide powder

| | |
|-----------------|----------------|
| Bioaccumulation | Not classified |
|-----------------|----------------|

Tin powder (7440-31-5)

| | |
|------|--------------------------------|
| LC50 | < 0.00036 (Pisces; Dry weight) |
|------|--------------------------------|

Aluminium oxide powder (1344-28-1)

| | |
|-----------------|----------------|
| Bioaccumulation | Not classified |
|-----------------|----------------|

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and zPzB assessments

No additional information available

12.6. Other adverse effects

Avoid discharge into the environment

SECTION 13: Disposal instructions

13.1. Waste treatment methods

| | |
|------------------------------------|--|
| Recommendations for waste disposal | Dispose of safely and in accordance with local/national regulations. |
| Ecology - waste products | Avoid discharge into the environment. |

SECTION 14: Disposal instructions

In accordance with ADR/ RID / IMDG/ IATA regulations.

14.1. UN number

Not classified as hazardous according to transport legislation

14.2. Correct shipping name in accordance with the UN Model Regulations

Not applicable

14.3. Transport hazards class

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

| | |
|-------------------|-------------------------------------|
| Other information | No additional information available |
|-------------------|-------------------------------------|

14.6. Special precautions for the user

14.6.1. Land transport

No additional information available

14.6.2. Sea transport

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterways transport

No additional information available

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulations

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

15.1.1. EU regulations

No limitations in accordance with Annex XVII of REACH
Do not contain REACH substance candidate list

15.1.2. National regulations

No additional information available

15.2. Chemical safety evaluation

No chemical safety evaluation has been conducted

SECTION 16: Other Information

| | |
|-------------------|--|
| Sources of data | EC Regulation no. 1272/2008 OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 16 December 2008 re. the classification, labelling and packing of substances and mixtures as amended and repealed in Regulation 67/548/EEC and 1999/45/EC and as amended in EC Regulation no. 1907/2006. |
| Other information | REACH Declaration: All information is based on current knowledge. Consistency of the information listed in this Safety Data Sheet with the information in the Chemical Safety Report is considered to the extent available at the time of compilation (see version number and date of revision). EXCLUSION OF LIABILITY The information provided in this sheet has been gathered from sources which, to the best of our knowledge, are reliable. However, the information was provided without any express or implied regarding its correctness. Conditions regarding the handling, storage, use or disposal of the product fall beyond the scope of our control and also possibly beyond the scope of our knowledge. For this and other reasons, we shall not assume any responsibility for, and expressly disclaim liability for, any loss, damage or expense whatsoever resulting from the handling, storage, use or disposal of the product. |

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purpose of the health, safety and environmental aspects of its use. It should therefore not be regarded as a guarantee for any specific property of the product.