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

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

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.

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, informed 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 resprator with filter. Make sure the area has local drainage or general ventilation in order to keep exposure to suibstance/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

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: Toxological Information

11.1. Information on toxological 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

SECTION 12: Ecological Information

12.1. Toxicity	
Tin powder (7440-31-5)	
LC50	0.42 mg/l (672 h; Salmo gairdneri (Oncorhynchus mykiss); Metaalion)
EC50 Daphnia 1	1.5 mg/l (504 h; Daphnia magna)

12.2. Persistence and degradability	
Mixture of Tin powder - Aluminiumm 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 - Aluminiumm 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

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

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.