

# SAFETY DATA SHEET



Brushable Zinc Coating

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

### 1.1 Product identifier

**Product name** : Brushable Zinc Coating  
**UFI** : 4XM0-K0W4-V000-9N5P  
**Product code** : 150010  
**Color** : Silver.  
**Product description** : Metal plating.-Paint.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

#### Identified uses

Metal plating.-Paint.

#### Uses advised against

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

WEICON GmbH & Co. KG  
Königsberger Str. 255,  
48157 Münster, Germany  
phone:+49 251 93220,  
email: info@weicon.de,  
URL: www.weicon.de

**e-mail address of person responsible for this SDS** : msds@weicon.de

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)  
TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Skin Sens. 1, H317

STOT SE 3, H335

STOT SE 3, H336

Aquatic Acute 1, H400

Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

## SECTION 2: Hazards identification

**Ingredients of unknown toxicity** : 43 percent of the mixture consists of component(s) of unknown acute oral toxicity  
37.5 percent of the mixture consists of component(s) of unknown acute dermal toxicity  
37.5 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

**Ingredients of unknown ecotoxicity** : Contains 5.5% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : H226 - Flammable liquid and vapor.  
H317 - May cause an allergic skin reaction.  
H335 - May cause respiratory irritation.  
H336 - May cause drowsiness or dizziness.  
H410 - Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

**General** : P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.

**Prevention** : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing vapor.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves.

**Response** : P391 - Collect spillage.  
P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.  
P302 + P352 - IF ON SKIN: Wash with plenty of water.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.

**Storage** : P405 - Store locked up.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

**Disposal** : P501 - Dispose of waste according to applicable legislation.

**Hazardous ingredients** : Hydrocarbons, C9 aromatics; Fatty acids, C14-18 and C16-18-unsatd., maleated and maleic anhydride

**Supplemental label elements** : Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Special packaging requirements

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

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## SECTION 2: Hazards identification

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Zinc powder - zinc dust (stabilized)	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥25 - ≤50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1] [2]
Hydrocarbons, C9 aromatics	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: -	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-	[1]
Aluminium powder (stabilized)	REACH #: 01-2119529243-45 EC: 231-072-3 CAS: 7429-90-5 Index: 013-002-00-1	≥5 - ≤10	Flam. Sol. 1, H228 Water-react. 2, H261	-	[1] [2]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119457273-39 EC: 918-481-9	≥5 - ≤10	Asp. Tox. 1, H304 EUH066	-	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥5 - <10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	EC: 269-662-8 CAS: 68308-64-5	≥0.3 - <1	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400	ATE [Oral] = 500 mg/kg M [Acute] = 1	[1]
Fatty acids, C14-18 and C16-18-unsatd., maleated	REACH #: 01-2120097630-54 EC: 288-306-2 CAS: 85711-46-2	≥0.3 - <1	Skin Irrit. 2, H315 Skin Sens. 1, H317	-	[1]
maleic anhydride	REACH #: 01-2119472428-31 EC: 203-571-6 CAS: 108-31-6 Index: 607-096-00-9	≤0.1	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 (respiratory system) (inhalation)	ATE [Oral] = 400 mg/kg Skin Sens. 1, H317: C ≥ 0.001%	[1] [2]

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### SECTION 3: Composition/information on ingredients

			EUH071 See Section 16 for the full text of the H statements declared above.		
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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a physical, health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

##### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness

## SECTION 4: First aid measures

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

## SECTION 6: Accidental release measures

### 6.3 Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### Seveso Directive - Reporting thresholds

##### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c E1	5000 tonnes 100 tonnes	50000 tonnes 200 tonnes

### 7.3 Specific end use(s)

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## SECTION 7: Handling and storage

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Zinc powder - zinc dust (stabilized)	<p><b>DFG MAC-values list (Germany, 7/2024) [Zinc and its inorganic compounds]</b> Develop C.                      PEAK 15 minutes: 0.4 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: respirable fraction.                      TWA 8 hours: 2 mg/m<sup>3</sup>. Form: inhalable fraction.                      TWA 8 hours: 0.1 mg/m<sup>3</sup>. Form: respirable fraction.                      PEAK 15 minutes: 4 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: inhalable fraction.</p>
Aluminium powder (stabilized)	<p><b>DFG MAC-values list (Germany, 7/2024) [Aluminium compounds, soluble (non-irritating)]</b> Develop C.                      PEAK 15 minutes: 0.01 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: inhalable fraction.                      TWA 8 hours: 0.005 mg/m<sup>3</sup>. Form: inhalable fraction.</p> <p><b>DFG MAC-values list (Germany, 7/2024) [Aluminium compounds, soluble (irritating)]</b> Develop C.                      PEAK 15 minutes: 0.0004 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: inhalable fraction.                      TWA 8 hours: 0.0002 mg/m<sup>3</sup>. Form: inhalable fraction.</p> <p><b>DFG MAC-values list (Germany, 7/2024) [Aluminium and its poorly soluble compounds]</b> Carc 4, Develop D.                      PEAK 15 minutes: 4 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: inhalable fraction.                      PEAK 15 minutes: 0.4 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].                      Form: respirable fraction.                      TWA 8 hours: 0.5 mg/m<sup>3</sup>. Form: inhalable fraction.                      TWA 8 hours: 0.05 mg/m<sup>3</sup>. Form: respirable fraction.</p> <p><b>TRGS 900 OEL (Germany, 3/2025) [Allgemeiner Staubgrenzwert]</b>                      TWA 8 hours: 1.25 mg/m<sup>3</sup>. Form: alveolar fraction.                      PEAK 15 minutes: 20 mg/m<sup>3</sup>. Form: inhalable fraction.                      TWA 8 hours: 10 mg/m<sup>3</sup>. Form: inhalable fraction.                      PEAK 15 minutes: 2.5 mg/m<sup>3</sup>. Form: alveolar fraction.</p>
xylene	<p><b>DFG MAC-values list (Germany, 7/2024) [Xylene]</b> Develop D.                      Absorbed through skin.                      TWA 8 hours: 50 ppm.                      PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour].                      TWA 8 hours: 220 mg/m<sup>3</sup>.                      PEAK 15 minutes: 440 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].</p> <p><b>TRGS 900 OEL (Germany, 3/2025) [Xylol]</b> Absorbed through skin.                      TWA 8 hours: 220 mg/m<sup>3</sup>.                      PEAK 15 minutes: 440 mg/m<sup>3</sup>.                      TWA 8 hours: 50 ppm.                      PEAK 15 minutes: 100 ppm.</p> <p><b>EU OEL (Europe, 1/2022) [xylene, mixed isomers]</b> Absorbed through skin.                      TWA 8 hours: 50 ppm.                      TWA 8 hours: 221 mg/m<sup>3</sup>.</p>

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## SECTION 8: Exposure controls/personal protection

maleic anhydride	<p>STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m<sup>3</sup>.</p> <p><b>DFG MAC-values list (Germany, 7/2024)</b> Develop C. Inhalation sensitizer , Skin sensitizer. TWA 8 hours: 0.02 ppm. CEIL: 0.05 ml/m<sup>3</sup>. TWA 8 hours: 0.081 mg/m<sup>3</sup>. CEIL: 0.2 mg/m<sup>3</sup>. PEAK 15 minutes: 0.081 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour]. PEAK 15 minutes: 0.02 ppm 4 times per shift [Interval: 1 hour].</p> <p><b>TRGS 900 OEL (Germany, 3/2025)</b> Inhalation sensitizer , Skin sensitizer. TWA 8 hours: 0.081 mg/m<sup>3</sup>. CEIL: 0.2025 mg/m<sup>3</sup>. TWA 8 hours: 0.02 ppm. CEIL: 0.05 ppm. PEAK 15 minutes: 0.081 mg/m<sup>3</sup>. PEAK 15 minutes: 0.02 ppm.</p>
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### Biological exposure indices

Product/ingredient name	Exposure indices
Aluminium powder (stabilized)	<p><b>DFG BEI-values list (Germany, 7/2024)</b> BEI: 50 µg/g creatinine, aluminium [in urine]. Sampling time: at the end of the shift, for long-term exposures after several previous shifts.</p> <p><b>TRGS 903 - BEI Values (Germany, 10/2024)</b> BEI: 50 µg/g creatinine, aluminum [in urine]. Sampling time: at the end of the shift, for long-term exposure after several previous shifts.</p>
xylene	<p><b>DFG BEI-values list (Germany, 7/2024) [Xylene (all isomers)]</b> Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 1800 mg/g creatinine, Methylhippuric acids (=toluric acids) (all isomers) [in urine]. Sampling time: end of exposure or end of shift.</p> <p><b>TRGS 903 - BEI Values (Germany, 10/2024) [Xylol alle Isomeren]</b> BEI: 2000 mg/l, methylhippuric acid [in urine]. Sampling time: end of exposure or end of shift.</p>

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

#### Product/ingredient name

Aluminium powder (stabilized)

#### Result

**DNEL - Workers - Long term - Inhalation**

3.72 mg/m<sup>3</sup>

Effects: Local

**DNEL - Workers - Long term - Inhalation**

3.72 mg/m<sup>3</sup>

Effects: Systemic

**DNEL - General population - Long term - Oral**

## SECTION 8: Exposure controls/personal protection

	3.95 mg/kg bw/day <u>Effects</u> : Systemic
xylene	<b>DNEL - General population - Long term - Oral</b> 5 mg/kg bw/day <u>Effects</u> : Systemic  <b>DNEL - General population - Long term - Inhalation</b> 65.3 mg/m <sup>3</sup> <u>Effects</u> : Local  <b>DNEL - General population - Long term - Inhalation</b> 65.3 mg/m <sup>3</sup> <u>Effects</u> : Systemic  <b>DNEL - General population - Long term - Dermal</b> 125 mg/kg bw/day <u>Effects</u> : Systemic  <b>DNEL - Workers - Long term - Dermal</b> 212 mg/kg bw/day <u>Effects</u> : Systemic  <b>DNEL - Workers - Long term - Inhalation</b> 221 mg/m <sup>3</sup> <u>Effects</u> : Local  <b>DNEL - Workers - Long term - Inhalation</b> 221 mg/m <sup>3</sup> <u>Effects</u> : Systemic  <b>DNEL - General population - Short term - Inhalation</b> 260 mg/m <sup>3</sup> <u>Effects</u> : Local  <b>DNEL - General population - Short term - Inhalation</b> 260 mg/m <sup>3</sup> <u>Effects</u> : Systemic  <b>DNEL - Workers - Short term - Inhalation</b> 442 mg/m <sup>3</sup> <u>Effects</u> : Local  <b>DNEL - Workers - Short term - Inhalation</b> 442 mg/m <sup>3</sup> <u>Effects</u> : Systemic
Fatty acids, C14-18 and C16-18-unsatd., maleated	<b>DNEL - General population - Long term - Oral</b> 1.5 mg/kg bw/day <u>Effects</u> : Systemic  <b>DNEL - General population - Long term - Dermal</b> 1.5 mg/kg bw/day <u>Effects</u> : Systemic  <b>DNEL - Workers - Long term - Dermal</b> 3 mg/kg bw/day <u>Effects</u> : Systemic
maleic anhydride	<b>DNEL - General population - Long term - Inhalation</b> 0.05 mg/m <sup>3</sup> <u>Effects</u> : Systemic

## SECTION 8: Exposure controls/personal protection

**DNEL - General population - Long term - Oral**  
0.06 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Long term - Inhalation**  
0.08 mg/m<sup>3</sup>  
Effects: Local

**DNEL - Workers - Long term - Inhalation**  
0.081 mg/m<sup>3</sup>  
Effects: Local

**DNEL - Workers - Long term - Inhalation**  
0.081 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - General population - Short term - Oral**  
0.1 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Short term - Dermal**  
0.1 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Long term - Dermal**  
0.1 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Short term - Dermal**  
0.2 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Long term - Dermal**  
0.2 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Short term - Inhalation**  
0.2 mg/m<sup>3</sup>  
Effects: Local

**DNEL - Workers - Short term - Inhalation**  
0.2 mg/m<sup>3</sup>  
Effects: Systemic

### PNECs

Not available.

### 8.2 Exposure controls

#### **Appropriate engineering controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

## SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : 1 - 4 hours (breakthrough time): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III ; 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Color** : Silver.
- Odor** : Aromatic. Benzene-like.
- Odor threshold** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : 136°C (276.8°F)
- Flammability** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
- Lower and upper explosion limit** : Lower: 0.6%  
Upper: 7%

## SECTION 9: Physical and chemical properties

<b>Flash point</b>	: Closed cup: 36°C (96.8°F)
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: Not available.
<b>pH</b>	: Not applicable.
<b>Viscosity</b>	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): >21 mm <sup>2</sup> /s
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient n-octanol/ water (log Pow)</b>	: Not applicable.
<b>Vapor pressure</b>	:

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
xylene	6.7	0.89				
Hydrocarbons, C9 aromatics	1.5001	0.2				
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	0.37503	0.05				
Fatty acids, C14-18 and C16-18-unsatd., maleated	0.30003	0.04		1.50013	0.2	
maleic anhydride	0.24752	0.033				

<b>Relative density</b>	: Not available.
<b>Density</b>	: 1.15 g/cm <sup>3</sup> [20°C (68°F)]
<b>Relative vapor density</b>	: Not available.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

<b>Fire point</b>	: >200°C
<b>Flow time (ISO 2431)</b>	: 70 to 90 s (room temperature) [Jet diameter: 4 mm]
<b>Explosive properties</b>	: Not available.
<b>Oxidizing properties</b>	: Not available.

#### 9.2.2 Other safety characteristics

<b>Miscible with water</b>	: No.
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## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Brushable Zinc Coating

## SECTION 10: Stability and reactivity

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidizing materials

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Highly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Product may release hydrogen - avoid sources of ignition.

## SECTION 11: Toxicological information

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

#### Acute toxicity

##### Product/ingredient name

xylene

##### Result

##### Rat - Oral - LD50

4300 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes

##### Mouse - Oral - LD50

2119 mg/kg

##### Human - Oral - LDLo

50 mg/kg

##### Mouse - Dermal - TDLo

727.3 ul/kg

Toxic effects: Metabolism (intermediary) - Effect on inflammation or mediation of inflammation

##### Rat - Oral - LD50

4300 mg/kg

##### Human - Oral - LDLo

50 mg/kg

##### Rabbit - Dermal - TDLo

4300 mg/kg

Toxic effects: Skin After topical exposure - Corrosive

maleic anhydride

##### Rat - Oral - LD50

400 mg/kg

##### Rabbit - Dermal - LD50

2620 mg/kg

**Conclusion/Summary [Product]** : Not available.

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Brushable Zinc Coating	N/A	12500	N/A	125	N/A
xylene	N/A	1100	N/A	11	N/A
Quaternary ammonium compounds, coco alkylethylidimethyl, Et sulfates	500	N/A	N/A	N/A	N/A
maleic anhydride	400	2620	N/A	N/A	N/A

Brushable Zinc Coating

## SECTION 11: Toxicological information

### Skin corrosion/irritation

#### Product/ingredient name

Zinc powder - zinc dust (stabilized)

xylene

#### Result

##### Human - Skin - Mild irritant

Duration of treatment/exposure: 72 hours

Amount/concentration applied: 300 ug l

##### Rat - Skin - Mild irritant

Duration of treatment/exposure: 8 hours

Amount/concentration applied: 60 uL

##### Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

##### Rabbit - Skin - Moderate irritant

Amount/concentration applied: 100 %

**Conclusion/Summary [Product]** : Not available.

### Serious eye damage/eye irritation

#### Product/ingredient name

xylene

maleic anhydride

#### Result

##### Rabbit - Eyes - Mild irritant

Amount/concentration applied: 87 mg

##### Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 5 mg

##### Rabbit - Eyes - Severe irritant

Amount/concentration applied: 1 %

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

Not available.

### Skin

**Conclusion/Summary [Product]** : Not available.

### Respiratory

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

Not available.

## SECTION 11: Toxicological information

**Conclusion/Summary [Product]** : Not available.

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

#### **Product/ingredient name**

Hydrocarbons, C9 aromatics

xylene

#### **Result**

STOT SE 3, H335 (Respiratory tract irritation)

STOT SE 3, H336 (Narcotic effects)

STOT SE 3, H335 (Respiratory tract irritation)

### Specific target organ toxicity (repeated exposure)

#### **Product/ingredient name**

xylene

maleic anhydride

#### **Result**

STOT RE 2, H373

STOT RE 1, H372 (respiratory system) (inhalation)

### Aspiration hazard

#### **Product/ingredient name**

Hydrocarbons, C9 aromatics

Hydrocarbons, C10-C13, n-alkanes,

isoalkanes, cyclics, < 2% aromatics

xylene

#### **Result**

ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

#### **Eye contact**

: No known significant effects or critical hazards.

#### **Inhalation**

: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

#### **Skin contact**

: May cause an allergic skin reaction.

#### **Ingestion**

: Can cause central nervous system (CNS) depression.

### Symptoms related to the physical, chemical and toxicological characteristics

#### **Eye contact**

: No specific data.

#### **Inhalation**

: Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

#### **Skin contact**

: Adverse symptoms may include the following:  
irritation  
redness

#### **Ingestion**

: No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

##### **Potential immediate effects**

: Not available.

##### **Potential delayed effects**

: Not available.

#### Long term exposure

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### **Product/ingredient name**

Zinc powder - zinc dust (stabilized)

#### **Result**

##### **Chronic - NOEC - Fresh water**

Fish - common carp - *Cyprinus carpio*

Age: 13 months; Size: 10.5 cm; Weight: 27.8 g

Effect: 2.6 µg/l [4 weeks]

Effect: Accumulation

##### **Acute - LC50 - Marine water**

Fish - Mudskipper - *Periophthalmus waltoni* - Adult

12.21 µg/l [96 hours]

Effect: Mortality

##### **Acute - EC50**

Algae - Green algae - *Raphidocelis subcapitata*

0.005 mg/l [72 hours]

Effect: Population

##### **Chronic - EC10**

OECD

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: <24 hours

6.3 µg/l [21 days]

Effect: Reproduction

##### **Acute - EC50 - Fresh water**

US EPA

Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate

Age: <24 hours

34 µg/l [48 hours]

Effect: Intoxication

##### **Chronic - EC10 - Fresh water**

OECD

Algae - Green algae - *Raphidocelis subcapitata* - Exponential

Brushable Zinc Coating

## SECTION 12: Ecological information

	growth phase 27.3 µg/l [72 hours] <u>Effect</u> : Population
Aluminium powder (stabilized)	<b>Chronic - NOEC - Fresh water</b> Aquatic plants - Coontail - <i>Ceratophyllum demersum</i> <u>Weight</u> : 3.5 g 9 mg/l [3 days] <u>Effect</u> : Enzymes
xylene	<b>Acute - LC50 - Marine water</b> Crustaceans - Daggerblade grass shrimp - <i>Palaemon pugio</i> 8500 µg/l [48 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Fresh water</b> Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 31 days; <u>Size</u> : 18.4 mm; <u>Weight</u> : 0.077 g 13.4 mg/l [96 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Fresh water</b> Fish - Goldfish - <i>Carassius auratus</i> <u>Age</u> : 1 to 1.5 years; <u>Size</u> : 13 to 20 cm; <u>Weight</u> : 20 to 80 g 16.94 mg/l [96 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Fresh water</b> Fish - Bluegill - <i>Lepomis macrochirus</i> - Juvenile (Fledgling, Hatchling, Weanling) <u>Size</u> : 3.65 cm; <u>Weight</u> : 0.9 g 15.7 mg/l [96 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Fresh water</b> Fish - Bluegill - <i>Lepomis macrochirus</i> <u>Size</u> : 3.8 to 6.4 cm; <u>Weight</u> : 1 to 2 g 20.87 mg/l [96 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Fresh water</b> Fish - Bluegill - <i>Lepomis macrochirus</i> <u>Weight</u> : 0.8 g 19 mg/l [96 hours] <u>Effect</u> : Mortality  <b>Acute - LC50 - Marine water</b> Crustaceans - Daggerblade grass shrimp - <i>Palaemon pugio</i> - Adult 8.5 ppm [48 hours] <u>Effect</u> : Mortality  <b>Acute - EC50 - Fresh water</b> Crustaceans - Ostracod - <i>Cypris subglobosa</i> 90 mg/l [48 hours] <u>Effect</u> : Intoxication
maleic anhydride	<b>Acute - LC50 - Fresh water</b> Fish - Western mosquitofish - <i>Gambusia affinis</i> - Adult 230 ppm [96 hours] <u>Effect</u> : Mortality

**Conclusion/Summary [Product]** : Not available.

## SECTION 12: Ecological information

### 12.2 Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
xylene	3.12	8.1 to 25.9	Low
maleic anhydride	-2.78	-	Low

### 12.4 Mobility in soil

#### Soil/Water partition coefficient

Product/ingredient name	logK <sub>oc</sub>	K <sub>oc</sub>
maleic anhydride	1.1	11.4841

#### Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Zinc powder - zinc dust (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C9 aromatics	No	No	No	No	No	No	No
Aluminium powder (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	No	No	No	No	No	No	No
xylene	N/A	N/A	N/A	Yes	N/A	N/A	N/A
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	No	No	No	No	No	No	No
Fatty acids, C14-18 and C16-18-unsatd., maleated	No	No	No	No	No	No	No
maleic anhydride	No	No	No	No	No	No	No

**Mobility** : Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

### 12.5 Results of PBT and vPvB assessment

#### Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Zinc powder - zinc dust (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C9 aromatics	No	N/A	N/A	No	N/A	N/A	N/A
Aluminium powder (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	No	N/A	N/A	No	N/A	N/A	N/A
xylene	No	N/A	No	Yes	No	N/A	No
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	No	N/A	N/A	No	N/A	N/A	N/A
Fatty acids, C14-18 and C16-18-unsatd., maleated	No	N/A	N/A	No	N/A	N/A	N/A
maleic anhydride	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Brushable Zinc Coating

## SECTION 12: Ecological information

### Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Zinc powder - zinc dust (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C9 aromatics	No	No	No	No	No	No	No
Aluminium powder (stabilized)	No	No	No	No	No	No	No
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	No	No	No	No	No	No	No
xylene	No	N/A	No	Yes	No	N/A	No
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	No	No	No	No	No	No	No
Fatty acids, C14-18 and C16-18-unsatd., maleated	No	No	No	No	No	No	No
maleic anhydride	No	No	No	No	No	No	No

**Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]** : The product does not meet the criteria to be considered as a PBT or vPvB.

### 12.6 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

#### European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Brushable Zinc Coating

## SECTION 13: Disposal considerations

Type of packaging	European waste catalogue (EWC)	
Can	15 01 10*	packaging containing residues of or contaminated by hazardous substances

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	UN1263	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	PAINT mixture	PAINT	PAINT	Paint
<b>14.3 Transport hazard class(es)</b>	3 	3 	3 	3 
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

### Additional information

#### ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Hazard identification number** 30

**Limited quantity** 5 L

**Special provisions** 163, 650, 367

**Tunnel code** (D/E)

**ADR Classification Code:** F1

#### ADN

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Special provisions** 163, 367, 650

#### IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Emergency schedules** F-E, \_S-E\_

**Special provisions** 163, 223, 367, 955

#### IATA

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

**Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.

**Special provisions** A3, A72, A192

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Brushable Zinc Coating

## SECTION 14: Transport information

14.7 Maritime transport in bulk according to IMO instruments : Not available.

## SECTION 15: Regulatory information

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

[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorization](#)

[Annex XIV](#)

None of the components are listed above the relevant limit.

[Substances of very high concern](#)

None of the components are listed above the relevant limit.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Product/ingredient name	%	Designation [Usage]
Brushable Zinc Coating	≥90	3

Labeling : Not applicable.

[Synthetic polymer microparticles - Designation 78](#)

Generic identity of polymer(s) :  Not applicable.

Total percentage of synthetic polymer microparticles :  Not applicable.

[Other EU regulations](#)

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

Explosive precursors : This product is regulated by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

[Ozone depleting substances \(EU 2024/590\)](#)

Not listed.

[Prior Informed Consent \(PIC\) \(649/2012/EU\)](#)

Not listed.

[Persistent Organic Pollutants](#)

Not listed.

[Seveso Directive](#)

This product is controlled under the Seveso Directive.

[Danger criteria](#)

Category

P5c  
E1

VOC content : 38.76 %

VOC (g/L) : 445.73

## SECTION 15: Regulatory information

### National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
zinc powder zinc dust (stabilised)	DFG MAC-values list	Zinc and its inorganic compounds	Develop C	-
aluminium powder (stabilised)	DFG MAC-values list	Aluminium compounds, soluble (non-irritating)	Develop C	-
	DFG MAC-values list	Aluminium compounds, soluble (irritating)	Develop C	
	DFG MAC-values list	Aluminium and its poorly soluble compounds	Carc 4, Develop D	
xylene	DFG MAC-values list	Xylene	Develop D	-
maleic anhydride	DFG MAC-values list	-	Develop C	-

**Storage class (TRGS 510) :** 3

### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

### Danger criteria

Category	Reference number
P5c	1.2.5.3
E1	1.3.1

**Hazard class for water :** 3

### Technical instruction on air quality control (TA Luft)

Number [Class]	Description	%
5.2.1	Total dust	5.5
5.2.2 [III]	Dusty inorganic substances	37.5
5.2.5	Organic substances	36.6
5.2.5 [I]	Organic substances	5.6
5.2.7.2	Poorly degradable, easily accumulating and highly toxic organic substances	0.62

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : Not determined.

**Canada** : At least one component is not listed in DSL but all such components are listed in NDSL.

**China** : All components are listed or exempted.

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

**Japan** : **Japan inventory (CSCL)**: Not determined.

**Japan inventory (ISHL)**: Not determined.

## SECTION 15: Regulatory information

<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are active or exempted.
<b>Viet Nam</b>	: Not determined.

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate B = Bioaccumulative BCF = Bioconcentration Factor CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods IMO = International Maritime Organization M = Mobile N/A = Not available P = Persistent PBT = Persistent, Bioaccumulative and Toxic PMT = Persistent, Mobile and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SGG = Segregation Group T = Toxic vB = Very Bioaccumulative vM = Very Mobile vP = Very Persistent vPvB = Very Persistent and Very Bioaccumulative vPvM = Very Persistent and Very Mobile
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

### Full text of abbreviated H statements

## SECTION 16: Other information

H226	Flammable liquid and vapor.
H228	Flammable solid.
H261	In contact with water releases flammable gas.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

### Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Flam. Sol. 1	FLAMMABLE SOLIDS - Category 1
Resp. Sens. 1	RESPIRATORY SENSITIZATION - Category 1
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
Water-react. 2	SUBSTANCES AND MIXTURES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES - Category 2

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