SAFETY DATA SHEET



Brushable Zinc Paint

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

1.1 Product identifier

Product name : Brushable Zinc Paint

Product code : 150000 Color : Silver.

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

Identified uses

Metal plating.-Paint.

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

Fax: +49(0)251 / 9322 - 244 Internet: www.weicon.de

e-mail address of person responsible for this SDS

: msds@weicon.de

1.4 Emergency telephone number

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 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

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

Date of issue/Date of revision: 03.09.2020Date of previous issue: 02.06.2020Version: 2.021/17

SECTION 2: Hazards identification

Hazard statements : H226 - Flammable liquid and vapor.

H319 - Causes serious eye irritation.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: P280 - Wear eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment. P264 - Wash thoroughly after handling.

Response : P391 - Collect spillage.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

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.

2.3 Other hazards

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	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
zinc powder zinc dust (stabilised)	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥25 - ≤50	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤10	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7	≤7.3	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332	[1] [2]

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 2/17

SECTION 3: Composition/information on ingredients

	CAS: 1330-20-7 Index: 601-022-00-9		Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
calcium oxide	REACH #: 01-2119475325-36 EC: 215-138-9 CAS: 1305-78-8	≤2.6	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

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 health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Imm

: 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.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed Over-exposure signs/symptoms

Date of issue/Date of revision: 03.09.2020Date of previous issue: 02.06.2020Version: 2.023/17

Brushable Zinc Paint

SECTION 4: First aid measures

Eve contact : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data. Skin contact : No specific data. 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, CO2, 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:

Use water spray to keep fire-exposed containers cool.

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.

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".

Date of issue/Date of revision : 03.09.2020 :02.06.2020 Version : 2.02 Date of previous issue

Brushable Zinc Paint

SECTION 6: Accidental release measures

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.

6.3 Methods and materials for containment and cleaning up

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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.

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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. 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	5000 tonne	50000 tonne
E1	100 tonne	200 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 5/17

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
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	TWA: 441 mg/m³ 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 441 mg/m³ 15 minutes.
	TWA: 50 ppm 8 hours.
	TWA: 220 mg/m³ 8 hours.
	STEL: 100 ppm 15 minutes.
calcium oxide	EH40/2005 WELs (United Kingdom (UK), 8/2018).
	STEL: 4 mg/m³ 15 minutes. Form: Respirable fraction
	TWA: 1 mg/m³ 8 hours. Form: Respirable fraction
	TWA: 2 mg/m ³ 8 hours.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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	Туре	Exposure	Value	Population	Effects
zinc powder zinc dust (stabilised)	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
ethylbenzene	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic

Date of issue/Date of revision : 03.09.2020 Date of previous issue :02.06.2020 Version : 2.02 6/17

Brushable Zinc Paint

SECTION 8: Exposure controls/personal protection

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_		DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
		DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
		DNEL	Short term Inhalation	293 mg/m³	Workers	Local
		DMEL	Long term Inhalation	442 mg/m³	Workers	Local
		DMEL	Short term Inhalation	884 mg/m³	Workers	Systemic
	zinc oxide	DNEL	Long term Inhalation	0.5 mg/m³	Workers	Local
		DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	2.5 mg/m ³	General population	Systemic
		DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
		DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
		DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	xylene	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	14.8 mg/m³	General population	Systemic
		DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
		DNEL	Long term Dermal	108 mg/kg bw/day	General population	Systemic
		DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
		DNEL	Short term Inhalation	289 mg/m ³	Workers	Local
		DNEL	Short term Inhalation	289 mg/m ³	Workers	Systemic
	calcium oxide	DNEL	Long term Inhalation	0.85 mg/m ³	General population	Local
		DNEL	Long term Inhalation	0.85 mg/m ³	General population	Systemic
		DNEL	Long term Inhalation	1 mg/m³	Workers	Local
		DNEL	Long term Inhalation	1 mg/m³	Workers	Systemic
						•

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 7/17

SECTION 8: Exposure controls/personal protection

]	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	4 mg/m³	Workers	Local
	DNEL	Short term Inhalation	4 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	4 mg/m³	General population	Local
	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
1	DNEL	Short term Oral	10 mg/kg bw/day	General population	Systemic
1	DNEL	Long term Oral	10 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	16 mg/m³	General population	Systemic
1	DNEL	Short term Dermal	100 mg/kg bw/day	General population	Systemic
]	DNEL	Short term Dermal	200 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs 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

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. 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: chemical splash goggles.

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): nitrile rubber; 4 - 8 hours (breakthrough time): Viton®/butyl rubber

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 8/17

SECTION 8: Exposure controls/personal protection

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Color : Silver.

Odor : Aromatic. Benzene-like.

: Not available. **Odor threshold** pН : Not available. Melting point/freezing point : Not available.

Initial boiling point and

boiling range

: 137°C

: Closed cup: 30°C Flash point

Evaporation rate Not available.

Flammability (solid, gas) : Highly flammable in the presence of the following materials or conditions: open

flames, sparks and static discharge.

Flammable in the presence of the following materials or conditions: heat.

Upper/lower flammability or

explosive limits

: Not available.

Vapor pressure : Not available. Vapor density : Not available. : Not available. Relative density **Density** : 1.84 g/cm³ [20°C]

: Insoluble in the following materials: cold water and hot water. Solubility(ies)

Partition coefficient: n-octanol/ : Not available.

Auto-ignition temperature : Not applicable. **Decomposition temperature** : Not available.

Viscosity : Kinematic (40°C): >0.21 cm²/s

Remarks : Not available. **Explosive properties** : Not available. : Not available. Oxidizing properties

9.2 Other information

Fire point : >200°C

Date of issue/Date of revision : 03.09.2020 :02.06.2020 Version : 2.02 9/17 Date of previous issue

Brushable Zinc Paint

SECTION 9: Physical and chemical properties

Solubility in water : Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : 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.

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

oxidizing materials

10.6 Hazardous decomposition products

: 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 toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-

Conclusion/Summary: Not available.

Acute toxicity estimates

Route

Dermal 9500 mg/kg

Inhalation (gases) 43181.82 ppm

Inhalation (vapors) 52.78 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
zinc powder zinc dust (stabilised)	Skin - Mild irritant	Human	-	72 hours 300 ug I	-
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 10/17

Brushable Zinc Paint

SECTION 11: Toxicological information

Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
Skin - Mild irritant	Rat	-	8 hours 60 UI	-
Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Skin - Moderate irritant	Rabbit	-	100 %	-

Conclusion/Summary

: Not available.

Sensitization

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
calcium oxide	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 11/17

Brushable Zinc Paint

SECTION 11: Toxicological information

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
zinc powder zinc dust (stabilised)	Acute EC50 106 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute EC50 10000 μg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute IC50 65 μg/l Marine water	Algae - Nitzschia closterium - Exponential growth phase	4 days
	Acute LC50 65 μg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 68 μg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 12.21 µg/l Marine water	Fish - Periophthalmus waltoni - Adult	96 hours
	Chronic EC10 27.3 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Chronic EC10 59.2 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 9 mg/l Fresh water	Aquatic plants - Ceratophyllum demersum	3 days
	Chronic NOEC 178 µg/l Marine water	Crustaceans - Palaemon elegans	21 days

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 12/17

SECTION 12: Ecological information

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	Chronic NOEC 2.6 µg/l Fresh water	Fish - Cyprinus carpio	4 weeks
ethylbenzene	Acute EC50 4600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
zinc oxide	Acute IC50 1.85 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
xylene	Acute EC50 90 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 13400 μg/l Fresh water	Fish - Pimephales promelas	96 hours
calcium oxide	Chronic NOEC 100 mg/l Fresh water	Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	46 days

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	-	low
zinc oxide	-	28960	high
xylene	3.12	8.1 to 25.9	low
calcium oxide	-	2.34	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 13/17

Brushable Zinc Paint

SECTION 12: Ecological information

12.6 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.

Type of packaging	European waste catalogue (EWC)	
15 01 04	metallic packaging	

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	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT mixture	PAINT	Paint
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes. Zinc powder - zinc dust (stabilized), zinc oxide	Yes. The environmentally hazardous substance mark is not required.

Additional information

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 14/17

SECTION 14: Transport information

ADR/RID The environmentally hazardous substance mark is not required when transported in

> sizes of ≤5 L or ≤5 kg. **Limited quantity** 5 L

Special provisions 163, 650, 367

Tunnel code (E)

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

user

14.6 Special precautions for : 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.

14.7 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.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances. mixtures and articles

Restrictions on Manufacture, Marketing and Use

Product name	CAS#	%	Restriction
ethylbenzene	100-41-4	<10	3
xylene	1330-20-7	1 - 10	3

Other EU regulations

Industrial emissions : Listed

(integrated pollution prevention and control) -

Industrial emissions : Listed

(integrated pollution prevention and control) -

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Date of issue/Date of revision : 03.09.2020 :02.06.2020 Version : 2.02 15/17 Date of previous issue

Brushable Zinc Paint

SECTION 15: Regulatory information

Not listed.

VOC content : 25.4 % **VOC (g/L)** : 467.4

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c E1

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 : Not determined.
China : Not determined.

Europe : All components are listed or exempted.

. Not determined. **Japan New Zealand** : Not determined. : Not determined. **Philippines** Republic of Korea : Not determined. **Taiwan** : Not determined. : Not determined. **Turkey United States** : Not determined. **Viet Nam** : Not determined.

15.2 Chemical Safety

: 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.

Abbreviations and

acronyms

Assessment

: ATE = Acute Toxicity Estimate

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

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 16/17

Brushable Zinc Paint

SECTION 16: Other information

RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

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
Eye Irrit. 2, H319	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Irrit. 2 STOT RE 2	ACUTE TOXICITY - Category 4 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED
Flam. Liq. 2 Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3
STOT SE 3	SPECIFIC TÁRGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Date of printing : 03.09.2020 Date of issue/ Date of : 03.09.2020

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Date of previous issue : 02.06.2020

Version : 2.02

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision : 03.09.2020 Date of previous issue : 02.06.2020 Version : 2.02 17/17