# **SAFETY DATA SHEET**

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

1.1 Product identifier

Product name : ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

**Product code** : B430B

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

**Material uses** : Paint or paint related material.

: Industrial use only.

# 1.3 Details of the supplier of the safety data sheet

Sherwin-Williams UK Limited - Protective & Marine

Coatings Division EMEAI

Tower Works Kestor Street Bolton BL2 2AL

United Kingdom +44 (0) 1204 521771

The Sherwin-Williams Company Inver France SAS 2 Rue Jean Revaus - BP 80088 - 79102 Thouars CEDEX

France

e-mail address of person responsible for this SDS

: hse.pm.emea@sherwin.com

### 1.4 Emergency telephone number

# National advisory body/Poison Center

Telephone number : 22 59 13 00

**Supplier** 

**Telephone number** : +(44)-870-8200 418

Hours of operation : Emergency contact available 24 hours a day

### **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 Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 1/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

### SECTION 2: Hazards identification

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**: Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention**: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling.

Response: Collect spillage.Storage: Not applicable.Disposal: Not applicable.

Hazardous ingredients : Xylene, mixed isomers

**Epoxy Polymer** 

Crystalline Silica, respirable powder

Supplemental label

elements

: FOR INDUSTRIAL USE ONLY

### Special packaging requirements

Not applicable.

### 2.3 Other hazards

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

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of

0.1% or higher.

Other hazards which do not result in classification

: None known.

# **SECTION 3: Composition/information on ingredients**

### 3.2 Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Zinc Powder	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥75 - ≤90	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Xylene, mixed isomers	REACH #: 01-2119488216-32 EC: 215-535-7	<10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332	ATE [Dermal] = 1100 mg/kg ATE [Inhalation	[1] [2]

Date of issue/Date of revision : 15, Apr. 2024 Date of previous issue : 19, Jan, 2024 Version : 15 2/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 3: Composition/information on ingredients**

	CAS: 1330-20-7		Skin Irrit. 2, H315	(gases)] = 6700	
	Index: 601-022-00-9		Eye Irrit. 2, H319	ppm	
			STOT SE 3, H335		
			STOT RE 2, H373		
			Asp. Tox. 1, H304		
Epoxy Polymer	CAS: 67924-34-9	≤5	Skin Irrit. 2, H315	-	[1]
			Eye Irrit. 2, H319		
			Skin Sens. 1, H317		
Crystalline Silica, respirable	EC: 238-878-4	≤3	STOT RE 1, H372	-	[1] [2]
powder	CAS: 14808-60-7		(inhalation)		
Ethylbenzene	REACH #:	≤3	Flam. Liq. 2, H225	ATE [Inhalation	[1] [2]
	01-2119489370-35		Acute Tox. 4, H332	(vapours)] = 11 mg/	
	EC: 202-849-4		STOT RE 2, H373	ĺ	
	CAS: 100-41-4		(hearing organs)		
	Index: 601-023-00-4		Asp. Tox. 1, H304		
			Aquatic Chronic 3,		
			H412		
Methyl n-Amyl Ketone	REACH #:	≤3	Flam. Liq. 3, H226	ATE [Oral] = 1600	[1] [2]
	01-2119902391-49		Acute Tox. 4, H302	mg/kg	
	EC: 203-767-1		Acute Tox. 4, H332	ATE [Inhalation	
	CAS: 110-43-0		STOT SE 3, H336	(vapours)] = 11 mg/	
	Index: 606-024-00-3			1	
Naphtha (petroleum), arom	EC: 271-635-0	≤3	Asp. Tox. 1, H304	-	[1]
	CAS: 68603-08-7				
	Index: 649-372-00-1				
Solvent naphtha	REACH #:	<1	Flam. Liq. 3, H226	-	[1]
(petroleum), light arom.	01-2119455851-35		STOT SE 3, H335		
	CAS: 128601-23-0		STOT SE 3, H336		
	Index: 649-356-00-4		Asp. Tox. 1, H304		
			Aquatic Chronic 2,		
			H411		
			EUH066		
			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.

#### <u>Type</u>

- [1] Substance classified with a 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

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

**Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation
 : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 153/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

### **SECTION 4: First aid measures**

### 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### 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.

See toxicological information (Section 11)

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing

media

: Recommended: alcohol-resistant foam, CO2, powders, water spray or mist.

Unsuitable extinguishing

media

: Do not use water jet.

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

Hazards from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may

cause a health hazard.

Hazardous combustion

products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

: Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 154/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 6: Accidental release measures**

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

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

Keep unnecessary and unprotected personnel from entering.

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

: Do not allow to enter drains or watercourses. If the product contaminates lakes. rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

: 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.

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

: Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 5/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 7: Handling and storage**

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

Store in accordance with local regulations.

### Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully

resealed and kept upright to prevent leakage.

Contaminated absorbent material may pose the same hazard as the spilled product.

Store in closed original container at temperatures between 5°C and 38°C.

### 7.3 Specific end use(s)

solutions

Recommendations Industrial sector specific

: Not available.

: Not available.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

# SECTION 8: Exposure controls/personal protection

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).

### 8.1 Control parameters

### Occupational exposure limits

Product/ingredient name	Exposure limit values
Xylene, mixed isomers	FOR-2011-12-06-1358 (Norway, 12/2022). [Xylene, all isomers] Absorbed through skin. Notes: indicative limit value TWA: 25 ppm 8 hours. TWA: 108 mg/m³ 8 hours.
Crystalline Silica, respirable powder	FOR-2011-12-06-1358 (Norway, 12/2022). Carcinogen. Notes: binding limit value  TWA: 0.05 mg/m³ 8 hours. Form: respirable dust
Ethylbenzene	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Carcinogen. Notes: indicative limit value TWA: 5 ppm 8 hours. TWA: 20 mg/m³ 8 hours.
Methyl n-Amyl Ketone	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value TWA: 25 ppm 8 hours. TWA: 115 mg/m³ 8 hours.

### **Biological exposure indices**

No exposure indices known.

### 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.

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 6/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 8: Exposure controls/personal protection**

: Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

# **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Zinc Powder	DNEL	Long term Dermal	83 mg/kg	Workers	Systemic
	DNEL	Long term	bw/day 5 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term Oral	0.83 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	2.5 mg/m <sup>3</sup>	General	Systemic
	DNEL	Inhalation Long term Dermal	83 mg/kg	population General	Systemic
	DIVLL	Long term Dermai	bw/day	population	Oystoniio
Xylene, mixed isomers	DNEL	Long term Dermal	212 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
				population	
	DNEL	Long term	221 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Inhalation Short term	289 mg/m³	Workers	Systemia
	DINEL	Inhalation	269 1119/111	vvorkers	Systemic
	DNEL	Short term	442 mg/m <sup>3</sup>	Workers	Local
	51122	Inhalation	1 .29,	- Transit	20041
	DNEL	Long term	65.3 mg/m <sup>3</sup>		Systemic
		Inhalation		population	
	DNEL	Short term	260 mg/m <sup>3</sup>	General	Local
	DNEL	Inhalation Short term	174 mg/m³	population General	Systemia
	DINEL	Inhalation	174 1119/111	population	Systemic
	DNEL	Long term Oral	1.5 mg/kg	General	Systemic
				population	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Methyl n-Amyl Ketone	DNEL	Short term Inhalation	1516 mg/ m³	Workers	Systemic
	DNEL	Long term Dermal	54.27 mg/	Workers	Systemic
	51122	Long tomi Borman	kg	- Transit	Cycleniic
	DNEL	Long term	394.25 mg/	Workers	Systemic
		Inhalation _	m³		
	DNEL	Long term Dermal	23.32 mg/	General	Systemic
			kg bw/day	population [Consumers]	
	DNEL	Long term	84.31 mg/	General	Systemic
	DIVLE	Inhalation	m <sup>3</sup>	population	Systemio
				[Consumers]	
	DNEL	Long term Oral	23.32 mg/	General	Systemic
			kg bw/day	population	
Colvent nonhthe (notraleum) liel-t	חאבי	Long torm Dames	25 ma/lin	[Consumers]	Systemia
Solvent naphtha (petroleum), light arom.	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
aivill.	DNEL	Long term	150 mg/m <sup>3</sup>	Workers	Systemic
	D. 1	Inhalation	1.00 1119/111		5,0.0.1.110
	DNEL	Long term Dermal	11 mg/kg	General	Systemic
			bw/day	population	
	D		00 / 3	[Consumers]	0
	DNEL	Long term	32 mg/m³	General	Systemic
		Inhalation		population [Consumers]	
	DNEL	Long term Oral	11 mg/kg	General	Systemic
			bw/day	population	_ ,
				[Consumers]	

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 157/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# SECTION 8: Exposure controls/personal protection

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
Zinc Powder	Fresh water	20.6 µg/l	-
	Marine water	6.1 µg/l	-
	Fresh water sediment	117.8 mg/kg dwt	-
	Marine water sediment	56.5 mg/kg dwt	-
	Soil	35.6 mg/kg dwt	-
	Sewage Treatment	100 μg/l	-
	Plant		
Methyl n-Amyl Ketone	Fresh water	0.0982 mg/l	-
	Marine water	0.00982 mg/l	-
	Fresh water sediment	1.89 mg/kg	-
	Marine water sediment	0.189 mg/kg	-
	Soil	0.321 mg/kg	-
	Sewage Treatment	12.5 mg/l	-
	Plant		

#### 8.2 Exposure controls

# Appropriate engineering controls

- : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.
- : Users are advised to consider national Occupational Exposure Limits or other equivalent values.

### **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. 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 Skin protection

: Use safety eyewear designed to protect against splash of liquids.

Hand protection

: Wear suitable gloves tested to EN374.

Gloves

: Gloves for short term exposure/splash protection (less than 10 min.): Nitrile>0.12

Gloves for splash protection need to be changed immediately when in contact with

chemicals.

Gloves for repeated or prolonged exposure (breakthrough time > 240 min.)

When the hazardous ingredients in Section 3 contain any of the following: Aromatic solvents (Xylene, Toluene) or Aliphatic solvents or Mineral Oil use: Polyvinyl alcohol

(PVA) gloves 0.2-0.3 mm

Otherwise use: Butyl gloves >0.3 mm

For long term exposure or spills (breakthrough time >480 min.): Use PE laminated

gloves as under gloves

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time

determined through testing.

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: Solvent resin

manufacturers and European Solvents Industry Group (ESIG)

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 158/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 8: Exposure controls/personal protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

### **Body protection**

- : Personnel should wear antistatic clothing made of natural fibers or of hightemperature-resistant synthetic fibers.
- : 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

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387). Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

# Environmental exposure controls

: Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

### 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: Gray.Odor: Solvent.

Odor threshold : Not Available (Not Tested).

pH : Not relevant/applicable due to nature of the product.

insoluble in water.

Melting point/freezing point Initial boiling point and

: 136°C

boiling range

Flash point : Closed cup: 27°C [Pensky-Martens Closed Cup]

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 159/18

: Not relevant/applicable due to nature of the product.

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 9: Physical and chemical properties**

Evaporation rate : 0.8 (butyl acetate = 1) **Flammability** : Flammable liquid.

Lower and upper explosion

limit

: LEL: 1% (Xylene, mixed isomers) UEL: 7.9% (Methyl n-Amyl Ketone)

: 0.95 kPa (7.1 mm Hg) Vapor pressure

Relative vapor density : 3.66 [Air = 1]

Relative density : 3.4

Solubility(ies)

Media	Result
cold water	Not soluble

water

Partition coefficient: n-octanol/ : Not relevant/applicable due to nature of the product.

Auto-ignition temperature

Ingredient name	°C	°F	Method
Methyl n-Amyl Ketone	392	737.6	

Decomposition temperature

: Not relevant/applicable due to nature of the product.

Viscosity

: Kinematic (40°C): >20.5 mm<sup>2</sup>/s

Explosive properties Oxidizing properties

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

Particle characteristics

Median particle size

: Not relevant/applicable due to nature of the product.

9.2 Other information

Heat of combustion : 2.723 kJ/g

### 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 : Stable under recommended storage and handling conditions (see Section 7).

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

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous

decomposition products

: Decomposition products may include the following materials: carbon monoxide,

carbon dioxide, smoke, oxides of nitrogen.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 10/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 11: Toxicological information**

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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	1600 mg/kg	-
Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-

### **Acute toxicity estimates**

Route	ATE value
Oral	150708.72 mg/kg
Dermal	18366.16 mg/kg
Inhalation (gases)	111866.62 ppm
Inhalation (vapors)	508.84 mg/l

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Powder	Skin - Mild irritant	Human	-	72 hours 300	-
				ug I	
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	
Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				mg	
Solvent naphtha (petroleum),	Eyes - Mild irritant	Rabbit	-	24 hours 100	-
light arom.				uL	

Conclusion/Summary

: Not available.

**Sensitization** 

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 1511/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 11: Toxicological information**

No data available

Conclusion/Summary

: Not available.

**Mutagenicity** 

No data available

**Carcinogenicity** 

No data available

Reproductive toxicity

No data available

**Teratogenicity** 

No data available

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
Methyl n-Amyl Ketone	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light arom.	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-
Crystalline Silica, respirable powder	Category 1	inhalation	-
Ethylbenzene	Category 2	-	hearing organs

### **Aspiration hazard**

Product/ingredient name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), arom	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1

### 11.2 Information on other hazards

# 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

Not available.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 12/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 12: Ecological information**

Product/ingredient name	Result	Species	Exposure
Zinc Powder	Acute EC50 10000 μg/l Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 34 µg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
		dubia - Neonate	
	Acute IC50 65 µg/l Marine water	Algae - Nitzschia closterium -	4 days
		Exponential growth phase	
	Acute LC50 68 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 12.21 µg/l Marine water	Fish - Periophthalmus waltoni -	96 hours
		Adult	
	Chronic EC10 6.3 µg/l	Daphnia - Daphnia magna -	21 days
		Neonate	
	Chronic NOEC 0.25 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 9 mg/l Fresh water	Aquatic plants - Ceratophyllum demersum	3 days
	Chronic NOEC 178 µg/l Marine water	Crustaceans - Palaemon	21 days
	Chronic NOEC 176 µg/i Marine Water	elegans	21 days
	Chronic NOEC 2.6 µg/l Fresh water	Fish - Cyprinus carpio	4 weeks
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
		pugio	
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethylbenzene	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp	48 hours
		Nauplii	
	Acute EC50 2.93 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours
		Neonate	
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Methyl n-Amyl Ketone	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
No data available				

# **Conclusion/Summary**: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	Low
Naphtha (petroleum), arom	-	10 to 2500	High
Solvent naphtha (petroleum), light arom.	-	10 to 2500	High

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: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 1513/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 12: Ecological information**

### 12.6 Endocrine disrupting properties

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

### **SECTION 13: Disposal considerations**

#### 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

European waste catalogue (EWC)

: Yes.

: waste paint and varnish containing organic solvents or other hazardous substances

08 01 113

Disposal considerations

: Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

### **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.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

European waste catalogue (EWC)

packaging containing residues of or contaminated by hazardous substances 15 01
 10\*

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 or ID number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT. Marine pollutant (Zinc Powder)	PAINT

Date of issue/Date of revision: 15, Apr, 2024Date of previous issue: 19, Jan, 2024Version: 1514/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 14: Transport information**

14.3 Transport Hazard Class(es)/ Label(s)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.  Tunnel code D/E	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.  Emergency schedules F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

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 Maritime transport in bulk according to IMO instruments

: Not applicable.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

### **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.

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

Product/ingredient name	%	Designation [Usage]
ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base	≥90	3
toluene	≤0.1	48
benzene	<0.1	5
		72

Labeling : Not applicable.

Other EU regulations

VOC content (2010/75/EU) : 9 w/w

> 307 g/l

Version : 15 Date of issue/Date of revision 15/18 : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

# **SECTION 15: Regulatory information**

Industrial emissions

(integrated pollution prevention and control) -

Air

Industrial emissions

: Listed

: Listed

(integrated pollution prevention and control) -

Water

**Explosive precursors** 

: Not applicable.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

### **National regulations**

Product/ingredient name	List name	Name on list	Classification	Notes
Crystalline Silica, respirable powder	Norway Occupational Exposure Limits	krystallinsk silika (SiO2), α-kvarts respirabelt støv	Carc. K	-
Ethylbenzene	Norway Occupational Exposure Limits	etyİbenzen	Carc. K	-

### 15.2 Chemical Safety

Assessment

: No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and

acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/20081

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

N/A = Not available

Key literature references and sources for data

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

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by

Commission Regulation (EU) 2020/878

Directive 2012/18/EU, and relative amendments & additions Directive 2008/98/EC, and relative amendments & additions Directive 2009/161/EU, and relative amendments & additions

**CEPE Guidelines** 

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 16/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

### **SECTION 16: Other information**

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
STOT RE 2, H373	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. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. Causes serious eye irritation. H319 Harmful if inhaled. H332 May cause respiratory irritation. H335 H336 May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated H372 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. 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 2
Aquatic Chronic 3
Asp. Tox. 1
Eye Irrit. 2
Flam. Liq. 2

**EUH066** 

ACUTE TOXICITY - Category 4
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 3

ASPIRATION HAZARD - Category 1

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3

Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITIZATION - Category 1

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

Date of printing : 15, Apr, 2024.

Date of issue/ Date of

revision

: 15, Apr, 2024

Date of previous issue : 19, Jan, 2024

: If there is no previous validation date please contact your supplier for more

information.

Version : 15

Notice to reader

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 19, Jan, 2024 Version : 15 17/18

ZINC CLAD IV 85% Epoxy Zinc-Rich Primer - Base

B430B

### **SECTION 16: Other information**

In accordance with Regulation (EC) 1907/2006, REACH Regulation, Articles 31, 37, any required hazard-related information on the use of substances received as downstream user will be sent forward. Consequently, the safety data sheets for some products will contain a SUMI - Safe Use of Mixture Information - attached to the safety data sheet.

SUMI(s) will be added to the SDS for products if both the following conditions are met:

- The product is classified as hazardous for health
- The product contains one or more REACH-registered substances for which extended safety data sheets (exposure scenarios) have been provided

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Date of issue/Date of revision : 15, Apr., 2024 Date of previous issue : 19, Jan., 2024 Version : 15 18/18