

SAFETY DATA SHEET

Date of issue/Date of revision

: 3 April 2024

Version

: 10.08



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

1.1 Product identifier

Product name : SIGMAZINC 109HS BASE REDGREY

Product code : 00218767

Other means of identification

Not available.

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

Product use : Professional applications, Used by spraying.

**Use of the substance/
mixture** : Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

Varossieau Suriname NV,
Mastanaweg 4, Paramaribo,
SURINAME

Tel: 00597 484447

Fax: 00597 483785

**e-mail address of person
responsible for this SDS** : Product.Stewardship.EMEA@ppg.com

**1.4 Emergency telephone
number** : 0031 (0)20 4075210

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

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

:



Code

: 00218767

Date of issue/Date of revision

: 3 April 2024

SIGMAZINC 109HS BASE REDGREY

SECTION 2: Hazards identification


Signal word	: Warning
Hazard statements	: Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.
<u>Precautionary statements</u>	
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. Avoid breathing vapour.
Response	: Collect spillage.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P261, P391, P501
Hazardous ingredients	: bis-[4-(2,3-epoxipropoxi)phenyl]propane Epoxy Resin (700<MW<=1100)
Supplemental label elements	: Contains epoxy constituents. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
<u>Special packaging requirements</u>	
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB	: 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	: Prolonged or repeated contact may dry skin and cause irritation.

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 (stabilised)	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]
bis-[4-(2,3-epoxipropoxi)	REACH #:	≥5.0 - ≤10	Skin Irrit. 2, H315	Skin Irrit. 2, H315: C ≥	[1]

Code : 00218767 **Date of issue/Date of revision** : 3 April 2024
SIGMAZINC 109HS BASE REDGREY

SECTION 3: Composition/information on ingredients

phenyl]propane	01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2		Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	5% Eye Irrit. 2, H319: C ≥ 5%	
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥1.0 - ≤5.0	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Hydrocarbons, C9, aromatics < 0.1% cumene	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	EUH066: C ≥ 20%	[1]
Epoxy Resin (700<MW ≤1100)	CAS: 25036-25-3	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤1.0	Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	M [Acute] = 1 M [Chronic] = 1	[1]

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.

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene.

Type

[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.

SUB codes represent substances without registered CAS Numbers.

Code : 00218767

Date of issue/Date of revision

: 3 April 2024

SIGMAZINC 109HS BASE REDGREY

SECTION 4: First aid measures

4.1 Description of first aid measures

- 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 recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- 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

Code : 00218767

Date of issue/Date of revision

: 3 April 2024

SIGMAZINC 109HS BASE REDGREY

SECTION 5: Firefighting measures

Hazards from the substance or mixture : Flammable liquid and vapour. 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 oxides
metal oxide/oxides

5.3 Advice for firefighters

Special precautions 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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 spilt 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 material 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. 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.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

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.

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

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 vapour 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 between the following temperatures: 0 to 35°C (32 to 95°F). 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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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	EU OEL (Europe, 1/2022). [xylene, mixed isomers pure] Absorbed through skin. STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
1-methoxy-2-propanol	EU OEL (Europe, 1/2022). Absorbed through skin. STEL: 568 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

<p>Recommended monitoring procedures</p>	<p>: 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.</p>
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DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
bis-[4-(2,3-epoxipropoxy)phenyl] propane	DNEL	Long term Inhalation	12.25 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	12.25 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	3.571 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	3.571 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.75 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	0.75 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic
xylene	DNEL	Long term Dermal	0.75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m³	Workers	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m³	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m³	General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
Hydrocarbons, C9, aromatics < 0.1% cumene	DNEL	Short term Inhalation	260 mg/m³	General population	Local
	DNEL	Short term Inhalation	260 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	11 mg/kg	General population	Systemic
	DNEL	Long term Oral	11 mg/kg	General population	Systemic

Code : 00218767		Date of issue/Date of revision		: 3 April 2024	
SIGMAZINC 109HS BASE REDGREY					
1-methoxy-2-propanol	DNEL	Long term Inhalation	32 mg/m³	General population	Systemic
	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43.9 mg/m³	General population	Systemic
	DNEL	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Systemic
	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/m³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
zinc oxide	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
zinc powder zinc dust (stabilised)	-	Fresh water	20.6 µg/l	Sensitivity Distribution
	-	Marine water	6.1 µg/l	Sensitivity Distribution
	-	Sewage Treatment Plant	100 µg/l	Assessment Factors
	-	Fresh water sediment	118 mg/kg dwt	Sensitivity Distribution
	-	Marine water sediment	56.5 mg/kg dwt	Equilibrium Partitioning
	-	Soil	35.6 mg/kg dwt	Sensitivity Distribution
	-	Fresh water	0.006 mg/l	Assessment Factors
bis-[4-(2,3-epoxipropoxy)phenyl] propane	-	Marine water	0.001 mg/l	Assessment Factors
	-	Fresh water sediment	0.996 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.1 mg/kg dwt	Equilibrium Partitioning
	-	Soil	0.196 mg/kg dwt	Equilibrium Partitioning
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Secondary Poisoning	11 mg/kg	Assessment Factors
	-	Fresh water	0.327 mg/l	-
xylene	-	Marine water	0.327 mg/l	-
	-	Sewage Treatment Plant	6.58 mg/l	-
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
	-	Fresh water	10 mg/l	Assessment Factors
	-	Marine water	1 mg/l	Assessment Factors
1-methoxy-2-propanol	-	Sewage Treatment Plant	100 mg/l	Assessment Factors
	-	Fresh water sediment	41.6 mg/kg	Equilibrium Partitioning
	-	Marine water sediment	4.17 mg/kg	Equilibrium Partitioning
	-	Soil	2.47 mg/kg	Equilibrium Partitioning
	-	Fresh water	20.6 µg/l	Sensitivity Distribution
	-	Marine water	6.1 µg/l	Sensitivity Distribution
	-	Fresh water sediment	117 mg/kg dwt	Sensitivity Distribution
zinc oxide	-	Sewage Treatment Plant	52 µg/l	Assessment Factors
	-	Marine water sediment	56.5 mg/kg dwt	Assessment Factors
	-	Soil	35.6 mg/kg dwt	Sensitivity Distribution

8.2 Exposure controls

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
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SIGMAZINC 109HS BASE REDGREY

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, vapour 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. 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 : 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. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. 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.

Gloves : butyl rubber

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 : 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. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

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.

Colour : Various

Code : 00218767 Date of issue/Date of revision : 3 April 2024
SIGMAZINC 109HS BASE REDGREY

SECTION 9: Physical and chemical properties

Odour	: Aromatic.																				
Odour threshold	: Not available.																				
Melting point/freezing point	: May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane. Weighted average: -45.73°C (-50.3°F)																				
Initial boiling point and boiling range	: >37.78°C																				
Flammability	: Not available.																				
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)																				
Flash point	: Closed cup: 33°C																				
Auto-ignition temperature	<table><tr><th>Ingredient name</th><th>°C</th><th>°F</th><th>Method</th></tr><tr><td>1-methoxy-2-propanol</td><td>270</td><td>518</td><td></td></tr></table>	Ingredient name	°C	°F	Method	1-methoxy-2-propanol	270	518													
Ingredient name	°C	°F	Method																		
1-methoxy-2-propanol	270	518																			
Decomposition temperature	: Stable under recommended storage and handling conditions (see Section 7).																				
pH	: Not applicable. insoluble in water.																				
Viscosity	: Kinematic (40°C): >21 mm²/s																				
Viscosity	: 60 - 100 s (ISO 6mm)																				
Solubility(ies)	:																				
Media	Result																				
cold water	Not soluble																				
Partition coefficient: n-octanol/ water	: Not applicable.																				
Vapour pressure	<table><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapour Pressure at 20°C</th><th colspan="3">Vapour pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td>1-methoxy-2-propanol</td><td>8.5</td><td>1.1</td><td></td><td></td><td></td><td></td></tr></table>	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	1-methoxy-2-propanol	8.5	1.1				
Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C																	
	mm Hg	kPa	Method	mm Hg	kPa	Method															
1-methoxy-2-propanol	8.5	1.1																			
Evaporation rate	: Highest known value: 0.814 (1-methoxy-2-propanol) Weighted average: 0.78compared with butyl acetate																				
Relative density	: 3.22																				
Vapour density	: Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane). Weighted average: 7.53 (Air = 1)																				
Explosive properties	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.																				
Oxidising properties	: Product does not present an oxidizing hazard.																				
Particle characteristics																					
Median particle size	: Not applicable.																				

9.2 Other information
No additional information.

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

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: When exposed to high temperatures may produce hazardous decomposition products.
Refer to protective measures listed in sections 7 and 8.
- 10.5 Incompatible materials: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- 10.6 Hazardous decomposition products: Evolves hydrogen on contact with water. Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Zinc powder - zinc dust (stabilized) bis-[4-(2,3-epoxipropoxi)phenyl]propane xylene Hydrocarbons, C9, aromatics < 0.1% cumene Epoxy Resin (700<MW<=1100) 1-methoxy-2-propanol zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5.4 mg/l	4 hours
	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Vapour	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m³	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary: There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Oedema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
xylene					

Conclusion/Summary

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

SECTION 11: Toxicological information

Skin	: There are no data available on the mixture itself.
Eyes	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
<u>Sensitisation</u>	

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxy)phenyl]propane	skin	Mouse	Sensitising

<u>Conclusion/Summary</u>	
Skin	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
<u>Mutagenicity</u>	
<u>Conclusion/Summary</u>	
: There are no data available on the mixture itself.	
<u>Carcinogenicity</u>	
<u>Conclusion/Summary</u>	
: There are no data available on the mixture itself.	
<u>Reproductive toxicity</u>	
<u>Conclusion/Summary</u>	
: There are no data available on the mixture itself.	
<u>Teratogenicity</u>	
<u>Conclusion/Summary</u>	
: There are no data available on the mixture itself.	
<u>Specific target organ toxicity (single exposure)</u>	

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Hydrocarbons, C9, aromatics < 0.1% cumene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects
	Category 3	-	Narcotic effects

<u>Specific target organ toxicity (repeated exposure)</u>	
Not available.	
<u>Aspiration hazard</u>	

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
Hydrocarbons, C9, aromatics < 0.1% cumene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	: Not available.
<u>Potential acute health effects</u>	
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	: Causes serious eye irritation.
<u>Symptoms related to the physical, chemical and toxicological characteristics</u>	
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking

Code : 00218767 Date of issue/Date of revision : 3 April 2024
SIGMAZINC 109HS BASE REDGREY

SECTION 11: Toxicological information

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. 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.

Other information : Not available.

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

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

Product/ingredient name	Result	Species	Exposure
Zinc powder - zinc dust (stabilized)	Acute EC50 0.106 mg/l Fresh water	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours
	Chronic EC10 6.3 µg/l	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
Hydrocarbons, C9, aromatics < 0.1% cumene 1-methoxy-2-propanol	Chronic NOEC 0.3 mg/l	Daphnia	21 days
	LC50 9.2 mg/l	Fish	96 hours
	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours

Code : 00218767 **Date of issue/Date of revision** : 3 April 2024
SIGMAZINC 109HS BASE REDGREY

SECTION 12: Ecological information

	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
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Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C9, aromatics < 0.1% cumene	-	78 % - 28 days	-	-

Conclusion/Summary : There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Bis-[4-(2,3-epoxipropoxy)phenyl]propane	-	-	Not readily
xylene	-	-	Readily
Hydrocarbons, C9, aromatics < 0.1% cumene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
Hydrocarbons, C9, aromatics < 0.1% cumene	3.7 to 4.5	10 to 2500	High
1-methoxy-2-propanol	<1	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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.

12.6 Endocrine disrupting properties

Not available.

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 minimised 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)

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

SECTION 13: Disposal considerations

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 minimised 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)
Container	15 01 06 mixed 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. Vapour 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 spilt 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	PAINT
14.3 Transport hazard class(es)	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.
Marine pollutant substances	Not applicable.	 Zinc powder - zinc dust (stabilized))	Not applicable.

Additional information

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

Tunnel code : (D/E)

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

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

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.

14.7 Transport in bulk according to IMO instruments : Not applicable.

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

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 authorisation](#)

[Annex XIV](#)
None of the components are listed.
[Substances of very high concern](#)

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](#) : Not applicable.

[Other national and international regulations.](#)
[Explosive precursors](#) : Not applicable.
[Ozone depleting substances \(1005/2009/EU\)](#)
Not listed.

[Seveso Directive](#)
This product is controlled under the Seveso Directive.

Danger criteria
Category
P5c E1

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. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

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

Classification	Justification
Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

[Full text of abbreviated H statements](#)

Code	: 00218767	Date of issue/Date of revision	: 3 April 2024
SIGMAZINC 109HS BASE REDGREY			

SECTION 16: Other information

	<div><div></div><div>H226</div><div>Flammable liquid and vapour.</div></div> <div><div></div><div>H304</div><div>May be fatal if swallowed and enters airways.</div></div> <div><div></div><div>H312</div><div>Harmful in contact with skin.</div></div> <div><div></div><div>H315</div><div>Causes skin irritation.</div></div> <div><div></div><div>H317</div><div>May cause an allergic skin reaction.</div></div> <div><div></div><div>H319</div><div>Causes serious eye irritation.</div></div> <div><div></div><div>H332</div><div>Harmful if inhaled.</div></div> <div><div></div><div>H335</div><div>May cause respiratory irritation.</div></div> <div><div></div><div>H336</div><div>May cause drowsiness or dizziness.</div></div> <div><div></div><div>H400</div><div>Very toxic to aquatic life.</div></div> <div><div></div><div>H410</div><div>Very toxic to aquatic life with long lasting effects.</div></div> <div><div></div><div>H411</div><div>Toxic to aquatic life with long lasting effects.</div></div> <div><div></div><div>H412</div><div>Harmful to aquatic life with long lasting effects.</div></div> <div><div></div><div>EUH066</div><div>Repeated exposure may cause skin dryness or cracking.</div></div>
Full text of classifications [CLP/GHS]	<div><div></div><div>Acute Tox. 4</div><div>ACUTE TOXICITY - Category 4</div></div> <div><div></div><div>Aquatic Acute 1</div><div>SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</div></div> <div><div></div><div>Aquatic Chronic 1</div><div>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1</div></div> <div><div></div><div>Aquatic Chronic 2</div><div>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2</div></div> <div><div></div><div>Aquatic Chronic 3</div><div>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3</div></div> <div><div></div><div>Asp. Tox. 1</div><div>ASPIRATION HAZARD - Category 1</div></div> <div><div></div><div>Eye Irrit. 2</div><div>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2</div></div> <div><div></div><div>Flam. Liq. 3</div><div>FLAMMABLE LIQUIDS - Category 3</div></div> <div><div></div><div>Skin Irrit. 2</div><div>SKIN CORROSION/IRRITATION - Category 2</div></div> <div><div></div><div>Skin Sens. 1</div><div>SKIN SENSITISATION - Category 1</div></div> <div><div></div><div>STOT SE 3</div><div>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3</div></div>

History

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Date of previous issue	: 30 August 2023
Prepared by	: EHS
Version	: 10.08

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.