# SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to GHS UN rev. 7

Date of issue/Date of revision 12 November 2024

Version 1.04

#### Section 1. Identification

**Product code** : 000001020162

Product name : SIGMAZINC 102 HS /109 HS HARDENER

Product type : Liquid.

Other means of identification 00218768; 00438803; 00480639

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

Product use : Hardener.

Professional applications, Used by spraying.

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

**Supplier's information**: PPG Asian Paints Private Limited

6A Shanti Nagar Santa Cruz (East) Mumbai - 400055

India

**Emergency telephone** 

number:

: +91 22 6815 8700

#### Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 5
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1C

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

SKIN SENSITISATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract

irritation) - Category 3

SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity:

21.2%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 21.2%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation

toxicity: 56%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 34.6%

**GHS** label elements

Hazard pictograms









India Page: 1/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### Section 2. Hazards identification

Signal word

: Danger

**Hazard statements** 

: Flammable liquid and vapour.

May be harmful if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation.

Harmful to aquatic life.

Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

**Prevention** 

: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapour. Wash hands thoroughly after handling. Do not touch eyes. Contaminated work clothing should not be allowed out of the workplace.

Response

: Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately. Get medical help. IF SWALLOWED: Get emergency medical help immediately. Get medical help. Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Get emergency medical help immediately. Get medical help. Wash with plenty of water. Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. If skin irritation or rash occurs: Get medical help. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help. Get medical help if you feel

**Storage Disposal** 

- : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

result in classification

Other hazards which do not : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

#### CAS number/other identifiers

**CAS** number : Not applicable.

Ingredient name	%	CAS number
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	25 - <50	68082-29-1
Amides, from C18-unsatd. fatty acid dimers, tall-oil fatty acids and	20 - <25	68953-09-3
triethylenetetramine, reaction products with bisphenol A-epichlorohydrin		
polymer		
xylene	10 - <20	1330-20-7
2-methylpropan-1-ol	10 - <20	78-83-1
benzyl alcohol	10 - <20	100-51-6
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
ethylbenzene	1 - <3	100-41-4
3,6-diazaoctanethylenediamin	1 - <3	112-24-3

India Page: 2/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### Section 3. Composition/information on ingredients

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 and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

#### Section 4. First aid measures

#### **Description of necessary first aid measures**

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

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

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.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. Skin contact

May cause an allergic skin reaction.

Ingestion : May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.

#### Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

**Skin contact** : Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

Ingestion Adverse symptoms may include the following:

stomach pains

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** 

: No specific treatment. **Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

India Page: 3/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

#### Section 4. First aid measures

See toxicological information (Section 11)

### Section 5. Firefighting measures

#### **Extinguishing media**

Suitable extinguishing

media

**Unsuitable extinguishing** 

media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: 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 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 thermal decomposition products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides

halogenated compounds

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### Section 6. Accidental release measures

#### 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. Do not breathe 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".

**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.

#### 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.

India Page: 4/14

Product name SIGMAZINC 102 HS /109 HS HARDENER

### Section 6. Accidental release measures

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 noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

#### **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 breathe vapour or mist. Do not ingest. 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. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

**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.

including any incompatibilities

Conditions for safe storage, : 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. Store locked up. 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.

### Section 8. Exposure controls/personal protection

**Control parameters** 

**Occupational exposure limits** 

India Page: 5/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
xylene	ACGIH TLV (United States, 7/2023) [p-xylene and mixtures containing p-xylene]
	Ototoxicant.
	TWA 8 hours: 20 ppm.
2-methylpropan-1-ol	ACGIH TLV (United States, 7/2023)
	TWA 8 hours: 50 ppm.
	TWA 8 hours: 152 mg/m <sup>3</sup> .
ethylbenzene	ACGIH TLV (United States, 7/2023)
	Ototoxicant.
	TWA 8 hours: 20 ppm.

# procedures

**Recommended monitoring**: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### 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.

#### **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.

#### **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**

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### **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.

#### **Gloves Body protection**

- : nitrile neoprene
- 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.

India Page: 6/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

# Section 8. Exposure controls/personal protection

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.

Based on the hazard and potential for exposure, select a respirator that meets the **Respiratory protection** 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.

### Section 9. Physical and chemical properties

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

**Appearance** 

**Physical state** : Liquid. Colour : Colourless. **Odour** Amine-like. **Odour threshold** : Not available. **Melting point/freezing point** : Not available. **Boiling point or initial** : >37.78°C (>100°F)

boiling point and boiling

range

**Flammability** : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Closed cup: 31°C (87.8°F) Flash point

: 335°C (635°F) **Auto-ignition temperature Decomposition temperature** : Not available. pН : Not applicable.

**Viscosity** : Dynamic (room temperature): Not available. Kinematic (room temperature): Not available.

Kinematic (40°C): >21 mm<sup>2</sup>/s

Media Result Solubility(ies)

cold water Not soluble

Partition coefficient: noctanol/water

: Not applicable.

Vapour pressure

	Vapou	Vapour Pressure at 20°C			Vapour pressure at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			

Relative density : 0.95

Relative vapour density

: Not available.

**Particle characteristics** 

: Not applicable. Median particle size : Not available. **Evaporation rate** 

India Page: 7/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### Section 10. Stability and reactivity

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

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

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

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

products.

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

oxidising agents, strong alkalis, strong acids.

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds

**Hazardous polymerisation**: Under normal conditions of storage and use, hazardous polymerisation will not

occur.

### **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl) phenol				
	LD50 Oral	Rat	1200 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

Conclusion/Summary <a href="Irritation/Corrosion">Irritation/Corrosion</a>

: There are no data available on the mixture itself.

India Page: 8/14

Product name SIGMAZINC 102 HS /109 HS HARDENER

### **Section 11. Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
xylene	Skin - Irritant Skin - Moderate irritant	Human Rabbit	-	- 24 hours 500 mg	-

#### **Conclusion/Summary**

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.

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitising
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitising

#### **Conclusion/Summary**

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Mutagenicity** 

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

**Carcinogenicity** 

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

**Reproductive toxicity** 

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

**Teratogenicity** 

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

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Amides, from C18-unsatd. fatty acid dimers, tall-oil fatty acids and triethylenetetramine, reaction products with bisphenol A-epichlorohydrin polymer	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

India Page: 9/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### **Section 11. Toxicological information**

Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### **Aspiration hazard**

Name	Result
xylene	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2
benzyl alcohol	ASPIRATION HAZARD - Category 2
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on likely routes

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

: Not available.

**Skin contact**: Causes severe burns. May be harmful in contact with skin. Defatting to the skin.

May cause an allergic skin reaction.

Ingestion : May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.

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

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion** : Adverse symptoms may include the following:

stomach pains

#### Delayed and immediate effects as well as 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.

India Page: 10/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### **Section 11. Toxicological information**

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.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Route	ATE value
	2154.08 mg/kg
Dermal	2201.05 mg/kg
Inhalation (vapours)	30.7 mg/l
Inhalation (dusts and mists)	3.94 mg/l

#### Other information

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. 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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
ethylbenzene	Acute LC50 >100 mg/l Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Fish Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	96 hours 48 hours

#### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
(dimethylaminomethyl)phenol	OECD 301D Ready Biodegradability - Closed Bottle Test	4 % - Not readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

India Page: 11/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

### Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and	-	-	Not readily
triethylenetetramine xylene benzyl alcohol 2,4,6-tris	- - -	- - -	Readily Readily Not readily
(dimethylaminomethyl)phenol ethylbenzene	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
benzyl alcohol	0.87	-	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
ethylbenzene	3.6	79.43	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

# Section 13. Disposal considerations

#### **Disposal methods**

: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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.

India Page: 12/14

Product name SIGMAZINC 102 HS /109 HS HARDENER

### **Section 14. Transport information**

	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide)	Not applicable.

#### **Additional information**

UN : None identified.

**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.

**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.

Transport in bulk according : Not applicable.

to IMO instruments

### **Section 15. Regulatory information**

#### **International regulations**

**Montreal Protocol** 

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

Not listed.

### Section 16. Other information

**History** 

Date of issue/Date of : 12 November 2024

revision

Date of previous issue : 10/9/2024

Version : 1.04
Prepared by : EHS

India Page: 13/14

**Product name SIGMAZINC 102 HS /109 HS HARDENER** 

#### Section 16. Other information

ey to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 5	Calculation method
ACUTE TOXICITY (dermal) - Category 5	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 1C	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
SKIN SENSITISATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract	Calculation method
irritation) - Category 3	
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Calculation method

#### ▼ Indicates information that has changed from previously issued version.

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India Page: 14/14