SAFETY DATA SHEET

Date of issue/Date of revision

: 23 December 2021 Version : 1.01



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

1.1 Product identifier	
Product name	: SIGMAZINC 102 HARDENER
Product code	: 000001117398
Product type	: Liquid.
Other means of identificat	tion
Other means of identification 00246199	tion
00246199	 tion s of the substance or mixture and uses advised against : Professional applications, Used by spraying.
00246199 1.2 Relevant identified uses	s of the substance or mixture and uses advised against

	· · · · · · · · · · · · · · · · · · ·
Sigma Paints Egypt Villa#8, street 279	
New Maadi, Cairo	
Egypt	
Tel: 00202 516 223 797	
Fax: 00202 516 38 04	
e-mail address of person responsible for this SDS	: PS.ACEMEA@ppg.com

1.4 Emergency telephone : +20 2 6840902 number

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 Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411 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

Code : 000001117398	Date of issue/Date of revision : 23 December 202
SIGMAZINC 102 HARDENER	
SECTION 2: Hazards	identification
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
Precautionary statements	1 5 5
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 vapour.
Response	: Collect spillage.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Not applicable.
Hazardous ingredients	 Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene xylene 2-methylpropan-1-ol 2,4,6-tris(dimethylaminomethyl)phenol 3,6-diazaoctanethylenediamin
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	<u>ents</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 vPvE
Other hazards which do not result in classification	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

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SECTION 3: Composition/information on ingredients

: Mixture

3.2 Mixtures

Product/ingredient name	Identifiers	% by weight	<u>Classification</u> Regulation (EC) No. 1272/2008 [CLP]	Туре
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	CAS: 68410-23-1	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥25 - ≤46	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	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	[1] [2]
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]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥1.0 - ≤5.0	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤3.1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	[1]
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≤1.8	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1] [2]

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid n	neasures
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 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effect		
Eye contact	es serious eye damage.	
Inhalation	cause respiratory irritation	
Skin contact	es skin irritation. Defatting	g to the skin. May cause an allergic skin reaction.
Ingestion	sive to the digestive tract.	Causes burns.
Over-exposure signs/sympt		
Eye contact	erse symptoms may includ ring ess	e the following:
Inhalation	erse symptoms may includ ratory tract irritation hing	e the following:
Skin contact	erse symptoms may includ or irritation ess ess king ering may occur	e the following:
Ingestion	rse symptoms may includ ach pains	e the following:
4.3 Indication of any immedia	al attention and special	treatment needed
Notes to physician		osition products in a fire, symptoms may be delayed. to be kept under medical surveillance for 48 hours.
Specific treatments	pecific treatment.	

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

English (GB)

Conforms to Regulation (EC)	No. 1907/2006 (REACH), Annex II	
Code : 000001117398 SIGMAZINC 102 HARDENER	B Date of issue/Date of revision : 23 December 2021	
SECTION 5: Firefight	ing 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 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 nitrogen 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, pro	tective 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".
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 contrainer. 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.

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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 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.
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. 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.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. 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				
ethylbenzene	EU OEL (Europe, 10/2019)	. Absorbed through skin.			
	STEL: 884 mg/m ³ 15 minu	ites.			
	STEL: 200 ppm 15 minute	S.			
	TWA: 442 mg/m ³ 8 hours.				
	TWA: 100 ppm 8 hours.				
xylene	EU OEL (Europe, 10/2019)	Absorbed through skin.			
	STEL: 442 mg/m ³ 15 minu	ites.			
	STEL: 100 ppm 15 minute	S.			
	TWA: 221 mg/m ³ 8 hours.				
	TWA: 50 ppm 8 hours.				
1-methoxy-2-propanol					
	English (GB)	Egypt	6/15		

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SECTION 8: Exposure	e controls/personal protection
	EU OEL (Europe, 10/2019). Absorbed through skin.
	STEL: 568 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2021).
51 1	TWA: 152 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
3,6-diazaoctanethylenediamin	
	TWA: 1 ppm
Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace
	atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
.2 Exposure controls	
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation of other engineering controls to keep worker exposure to airborne contaminants below ar 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 measur	<u>es</u>
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	: Chemical splash goggles and face shield.
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.
	as included in the user's risk assessment.

Conforms to Regulation (EC	No. 1907/2006 (REACH), Annex II
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SECTION 8: Exposu	e controls/personal protection
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic 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.
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

SECTION 9: Physical and chemical properties

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

will be necessary to reduce emissions to acceptable levels.

cases, fume scrubbers, filters or engineering modifications to the process equipment

9.1 Information on basic physical and chemical properties

Water							
Partition coefficient: n-octanol/ water	: Not applicable.						
Solubility(ies)	: Insoluble in the follo	wing mate	erials: co	ld water.			
Relative density	: 0.91						
Vapour density	Highest known valu average: 3.61 (Air :		ir = 1) (3,6-diazaoctar	nethylene	ediamin).	Weighted
	2-methylpropan-1-ol	<12	<1.6	DIN EN 13016-2			
	ingreatent name	mm Hg	kPa	Method	mm Hg	kPa	Method
Vapour pressure	: Ingredient name	Vapor	ur Press	sure at 20°C	Vap	our pres	sure at 50°C
Upper/lower flammability or explosive limits	: Greatest known ran	ige: Lower	1.48%	Upper: 13.74	% (1-mei	noxy-2-p	ropanoi)
Flammability (solid, gas)	•	 liquid Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol) 					rononol)
Evaporation rate	butyl acetate						
Flash point	: Closed cup: 26°C						
Initial boiling point and boiling range	: >37.78°C						
Melting point/freezing point	: May start to solidify data for the followin -81.76°C (-115.2°F)	g ingrediei					
рН	: insoluble in water.						
Odour threshold	: Not available.						
Odour	: Aromatic.						
Colour	: Colourless.						
Physical state	: Liquid.						

SECTI	SECTION 9: Physical and chemical properties						
SIGMAZI	NC 102 HARDENER						
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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II							

	Ingredient name	°C	°F	Method	
	1-methoxy-2-propanol	270	518		
Decomposition temperature Viscosity	: Stable under recommend : Kinematic (40°C): >21 mr	0	handling cond	ditions (see Section 7).	
Explosive properties Oxidising properties	Product does not presentProduct does not present	•			

9.2 Other information

No additional information.

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 nitrogen oxides			

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapour	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 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	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Acute toxicity estimates

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SECTION 11: Toxicological information

Route	ATE value
Oral	44390.41 mg/kg
Dermal	7576.25 mg/kg
Inhalation (vapours)	28.53 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene 2,4,6-tris(dimethylaminomethyl)phenol		Rabbit Rabbit	-	24 hours 500 mg 4 hours	- 7 days

Conclusion/Summary

: There are no data available on the mixture itself.

Skin Eyes

Code

: 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, reaction products with polyethylenepolyamines	skin	Mouse	Sensitising
2,4,6-tris(dimethylaminomethyl)phenol 3,6-diazaoctanethylenediamin	skin skin	Guinea pig Guinea pig	Sensitising 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)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

Information on likely routes of exposure

: Not available.

English (GB)

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ECTION 11: Toxico	0	gical information
Potential acute health effec	s	
Inhalation	1	May cause respiratory irritation.
Ingestion	1	Corrosive to the digestive tract. Causes burns.
Skin contact	1	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	1	Causes serious eye damage.
Symptoms related to the ph	ys	ical, chemical and toxicological characteristics
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	1	Adverse symptoms may include the following: stomach pains
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Eye contact		Adverse symptoms may include the following: pain watering redness
	<u>cts</u>	s 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	1	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
Conclusion/Summary		Not available.
General		May cause damage to organs through prolonged or repeated exposure. 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	1	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.

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.

Date of issue/Date of revision

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	EC50 4.11 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh	Daphnia -	-
	water	Ceriodaphnia dubia	
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l	Fish	96 hours
	Fresh water		
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ethylbenzene		15 % - 28 days 79 % - Readily - 10 days		-		-
ettybenzene	-	79 /8 - Readily - TO days		-		-
Conclusion/Summary : There are no data available on the mixture itself.						
Product/ingredient name	Aquatic half-life	Photo	lysis	Bi	odegradability	
Fatty acids, C18-unsatd., dimers, reaction products		; -	-		No	t readily
with polyethylenepolyamines ethylbenzene		-	-		Re	adily

12.3 Bioaccumulative potential

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

12.4 Mobility in soil

xylene

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.

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

English ((GB)
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Readily

Date of issue/Date of revision

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)

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	ΙΑΤΑ
14.1 UN 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		Ш	Ш
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines)	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.

English (GB)	Egypt	13/15

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II					
Code	: 000001117398	Date of issue/Date of revision : 23 December 2021			
SIGMAZINC 102 HARDENER					
SECTION	I 14: Transpo	ort information			
ΙΑΤΑ	: The enviro regulations	nmentally hazardous substance mark may appear if required by other transportation			
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 Transpo according to instruments		: Not applicable.			
SECTION	I 15: Regulat	ory information			

- **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. : ATE = Acute Toxicity Estimate **Abbreviations and** CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. acronyms 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number Full text of abbreviated H : H225 Highly flammable liquid and vapour. statements H226 Flammable liquid and vapour. Harmful if swallowed. H302 H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. Harmful if inhaled. H332 H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. English (GB) Egypt

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Code : 00000111739 SIGMAZINC 102 HARDENEF	Date of issue/Date of revision : 23 December 2021
SECTION 16: Other	nformation
	 H373 May cause damage to organs through prolonged or repeated exposure. 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 Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Skin Corr. 1B Skin Corr. 1C Skin Sens. 1 Skin Sens. 1 Stort RE 2 Stort SE 3 ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 Flam. Liq. 3 Skin Corr. 1B Skin Corr. 1C Skin Sens. 1 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Stort RE 2 Stort SE 3 ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 Serious EYE DAMAGE/EYE IRRITATION - Category 1 Skin Sens. 1 Skin Sens. 1 Skin Sens. 1 Stort RE 2 Stort SE 3 ACUTE TOXICITY - Category 4 ACUTE TOXICITY - Category 2 Stort SE 3 ACUTE TOXICITY - Category 4 ACUTE TOXICITY - Category 1 Skin Sens. 1B Stort RE 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
<u>History</u>	
Date of issue/ Date of revision	: 23 December 2021
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Prepared by	: EHS
Version	: 1.01
<u>Disclaimer</u>	

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