SAFETY DATA SHEET

Date of issue/Date of revision

: 22 February 2023 Version : 4.01



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

1.1 Product identifier	
Product name	: SIGMASHIELD 880 BASE RAL 5002
Product code	: 00387636
Product type	: Liquid.
Other means of identificatio	n
Not available.	
1.2 Relevant identified uses o	f 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 t	he safety data sheet
Sigma Paint Saudi Arabia Ltd.	
PO Box 7509 Dammam 31472	
Saudi Arabia	
Tel: 00966 138 47 31 00	
Fax: 00966 138 47 17 34	
e-mail address of person responsible for this SDS	: ndpic@sfda.gov.sa

1.4 Emergency telephone : 00966 138473100 extn 1001 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 Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 3, H412 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

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SIGMASHIELD 880 BASE RAL	5002	, ,
SECTION 2: Hazards	lae	ntification
Hazard pictograms	:	
Signal word	: W	arning
Hazard statements	Ca M Ca Su	ammable liquid and vapour. auses skin irritation. ay cause an allergic skin reaction. auses serious eye irritation. uspected of causing genetic defects. armful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	pr hc	o not handle until all safety precautions have been read and understood. Wear otective gloves, protective clothing and eye or face protection. Keep away from heat, ot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid lease to the environment.
Response	: IF	exposed or concerned: Get medical advice or attention.
Storage	: No	ot applicable.
Disposal		spose of contents and container in accordance with all local, regional, national and ternational regulations.
Hazardous ingredients	Er Pl 2,	s-[4-(2,3-epoxipropoxi)phenyl]propane boxy Resin (700 <mw<=1100) nenol, methylstyrenated 3-epoxypropyl neodecanoate ctadecanamide, N,N'-1,6-hexanediylbis[12-hydroxy-</mw<=1100)
Supplemental label elements	W	ontains epoxy constituents. May produce an allergic reaction. 'arning! Hazardous respirable droplets may be formed when sprayed. Do not breathe oray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: No	ot applicable.
Special packaging requirem	ents	
Containers to be fitted with child-resistant fastenings	: No	ot applicable.
Tactile warning of danger	: No	ot applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB	: Tł	nis mixture does not contain any substances that are assessed to be a PBT or a vPvE
Other hazards which do not result in classification	: Pr	olonged or repeated contact may dry skin and cause irritation.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
øis-[4-(2,3-epoxipropoxi) phenyl]propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥10 - ≤22	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
Epoxy Resin (700 <mw <=1100)</mw 	CAS: 25036-25-3	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥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	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[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 - <3.0	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
2,3-epoxypropyl neodecanoate	REACH #: 01-2119431597-33 EC: 247-979-2 CAS: 26761-45-5	≥0.10 - ≤2.1	Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411	-	[1]
Octadecanamide, N, N'-1,6-hexanediylbis [12-hydroxy-	CAS: 55349-01-4	≥1.0 - ≤5.0	Skin Sens. 1, H317 Aquatic Chronic 4, H413	-	[1]
			See Section 16 for the full text of the H statements declared above.		

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

<u>Type</u>

7 Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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SECTION 3: Composition/information on ingredients

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 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

	toms and enects, both acute and delayed
Potential acute health et	ffects
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.
<u>Over-exposure signs/sy</u>	<u>mptoms</u>
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 imm	nediate medical attention and special treatment needed
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.
	: No specific treatment.

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

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SECTION 5: Firefig	phting 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 harmful 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 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-fighte	: 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 Europear standard EN 469 will provide a basic level of protection for chemical incidents.

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. 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.
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.

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

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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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. 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: Not available.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							
e thylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin. STEL: 884 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 442 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.						
xylene	EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed through skin. STEL: 442 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m ³ 8 hours.						
	English (GB) United Arab Emirates 6/15						

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SECTION 8: Exposur	e controls/personal protection
2-methylpropan-1-ol	TWA: 50 ppm 8 hours. ACGIH TLV (United States, 1/2022). TWA: 152 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
Recommended monitoring procedures	: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 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 an 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 measu	<u>res</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 <u>Skin protection</u>	: Chemical splash goggles.
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 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	:

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SECTION 8: Exposure	con	trols/persona	l prote	ction				
Environmental exposure : controls	haza are e certi with Emis	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. Emissions from ventilation or work process equipment should be checked to ensure						
controis	case	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 a	nd	chemical prop	oerties					
he conditions of measurement o	f all p	roperties are at stand	dard temp	erature	and press	ure unless	otherwise	indicated.
.1 Information on basic physic	al an	d chemical properti	ies					
Appearance								
Physical state	: 1	Liquid.						
Colour		Blue.						
Odour	: (Characteristic.						
Odour threshold		Not available.						
Melting point/freezing point			t the follo	wina ter	nnerature:	8 to 12°C	(46.4 to 53	(6°F) This is
menting point needing point	k	Aay start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is ased on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane. Veighted average: -25.03°C (-13.1°F)						
Initial boiling point and boiling range	: >	>37.78°C						
Flammability	: 1	Not available.						
Upper/lower flammability or explosive limits	: (Greatest known rang	e: Lower:	1.7% L	Jpper: 10.9	% (2-met	hylpropan-′	1-ol)
Flash point	: (Closed cup: 29°C						
Auto-ignition temperature	: [Ingredient name	name		°C °F		Method	
		2,3-epoxypropyl neodeca	noate	276	528	8.8		
Decomposition temperature pH Viscosity Solubility(ies)	: 1	Stable under recommended storage and handling conditions (see Section 7). Not applicable. insoluble in water. Kinematic (40°C): >21 mm ² /s						
Media	· ·	Result						
cold water		Not soluble						
Partition coefficient: n-octano water	l/ : N	Not applicable.						
Vapour pressure			Vapour Pressure a		sure at 20°	C Va	apour pressure at 5	
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	Ī	2-methylpropan-1-ol	<12	<1.6	DIN EN 13016-2			
Evaporation rate		Highest known value: 0.84 (ethylbenzene) Weighted average: 0.77compared with butyl acetate						
Relative density		1.36						
Vapour density	١	Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane). Weighted average: 9.09 (Air = 1)						
Explosive properties		The product itself is r vapour or dust with a			the formati	ion of an e	explosible r	nixture of

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SECTION 9: Physica	I and chemical properties
Oxidising properties	: Product does not present an oxidizing hazard.
Particle characteristics	
Median particle size	: Not applicable.
9.2 Other information	
No additional information.	
SECTION 10: Stabilit	y 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: Depending on conditions, decomposition products may include the following materials:
carbon oxides nitrogen oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
s-[4-(2,3-epoxipropoxi)phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<=1100)<>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 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	-
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	-
2,3-epoxypropyl neodecanoate	LD50 Dermal	Rat	3800 mg/kg	-
	LD50 Oral	Rat	9.6 g/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

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SECTION 11: Toxicological information

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

Conclusion/Summary

: There are no data available on the mixture itself.

Skin Eyes

Code

There are no data available on the mixture itself.There are no data available on the mixture itself.

Respiratory Sensitisation

Product/ingr	redient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi)phenyl]propane		skin	Mouse	Sensitising
Conclusion/Summary				
Skin	: There are no data avai	lable on the mixture	e itself.	
Respiratory	: There are no data available on the mixture itself.			
Mutagenicity				
Conclusion/Summary	: There are no data avai	lable on the mixture	e itself.	
Carcinogenicity				
Conclusion/Summary	: There are no data avai	lable on the mixture	e itself.	
Reproductive toxicity				
Conclusion/Summary	: There are no data avai	lable on the mixture	e itself.	
Teratogenicity				
Conclusion/Summary	: There are no data avai	lable on the mixture	e itself.	
Specific target organ toxi	<u>city (single exposure)</u>			

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Produ	ct/ingredient name	Result
ethylbenzene xylene		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Information on likely routes of exposure	: Not available.	
Potential acute health ef	fects	
Inhalation	: No known significant effect	ts or critical hazards.
Ingestion	: No known significant effect	ts or critical hazards.
Skin contact	: Causes skin irritation. Defa	atting to the skin. May cause an allergic skin reaction.

Conforms to Regulation (EC)) No	. 1907/2006 (REACH), Annex II
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SECTION 11: Toxico	lo	gical information
Eye contact	1	Causes serious eye irritation.
Symptoms related to the pl		ical, chemical and toxicological characteristics
Inhalation	1	No specific data.
Ingestion	1	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness dryness cracking
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Delayed and immediate effe	ects	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 eff	ect	<u>S</u>
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	:	Suspected of causing genetic defects.
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

Code : 00387636 SIGMASHIELD 880 BASE RAL 5002 Date of issue/Date of revision

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SECTION 12: Ecological information

Result	Species	Exposure
Acute LC50 1.8 mg/l Fresh	Daphnia - daphnia	48 hours
water	magna	
Chronic NOEC 0.3 mg/l	Daphnia	21 days
Acute EC50 1.8 mg/l Fresh	Daphnia	48 hours
water		
Chronic NOEC 1 mg/l Fresh	Daphnia -	-
water	Ceriodaphnia dubia	
Acute EC50 1100 mg/l	Daphnia	48 hours
Acute EC50 3.5 mg/l	Algae	96 hours
Acute EC50 4.8 mg/l	Daphnia - Daphnia	48 hours
	magna	
Acute LC50 9.6 mg/l	Fish - Oncorhynchus	96 hours
	Acute LC50 1.8 mg/l Fresh water Chronic NOEC 0.3 mg/l Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water Acute EC50 1100 mg/l Acute EC50 3.5 mg/l Acute EC50 4.8 mg/l	Acute LC50 1.8 mg/l Fresh waterDaphnia - daphnia magnaChronic NOEC 0.3 mg/l Acute EC50 1.8 mg/l Fresh waterDaphniaChronic NOEC 1 mg/l Fresh waterDaphnia - Ceriodaphnia dubiaAcute EC50 1100 mg/l Acute EC50 3.5 mg/l Acute EC50 4.8 mg/lDaphnia - Daphnia

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-
Conclusion/Summary : There are no data available on the mixture itself.				
Product/ingredient name		Aquatic half-life	Photolysis	Biodegradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
s-[4-(2,3-epoxipropoxi)phenyl]propane	-	-	Not readily
ethylbenzene	-	-	Readily
xylene	-	-	Readily
2,3-epoxypropyl neodecanoate	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Phenol, methylstyrenated	3.627	-	low
ethylbenzene	3.6	79.43	low
xylene	3.12	7.4 to 18.5	low
2-methylpropan-1-ol	1	-	low
2,3-epoxypropyl neodecanoate	4.4	-	high

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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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

Code

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 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	Ш	Ш	III
14.5 Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID	: None identified.
Tunnel code	: (D/E)
IMDG	: None identified.
ΙΑΤΑ	: None identified.

Conforms to Regulation (EC) N	lo. 1907/2006 (REACH), Annex II	
Code : 00387636	Date of issue/Date of revision : 22 February 2023	
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SECTION 14: Transpo	ort information	
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.	
SECTION 15: Regulat	ory information	
15.1 Safety, health and enviro	nmental regulations/legislation specific for the substance or mixture	
EU Regulation (EC) No. 1907	2006 (REACH)	
Annex XIV - List of substan	ces subject to authorisation	
Annex XIV		
None of the components are	listed.	
Substances of very high co	ncern	
None of the components are	listed.	
	: Not applicable.	
on the manufacture,		
placing on the market and use of certain		
dangerous substances,		
mixtures and articles		
Other national and internation	nal regulations.	
Ozone depleting substances	<u>(1005/2009/EU)</u>	
Not listed.		
15.2 Chemical safety assessment	No Chemical Safety Assessment has been carried out.	

SECTION 16: Other information

Abbreviations and acronyms		Acute Toxicity Estimate Classification, Labelling and Packaging Regulation [Regulation (EC) No.
	1272/20	
		atement = CLP-specific Hazard statement
	PNEC =	Predicted No Effect Concentration
	RRN = I	REACH Registration Number
Full text of abbreviated H	: H225	Highly flammable liquid and vapour.
statements	H226	Flammable liquid and vapour.
	H304 H312	May be fatal if swallowed and enters airways. Harmful in contact with skin.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
	H341	Suspected of causing genetic defects.
	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.
	H413	May cause long lasting harmful effects to aquatic life.
		English (GB) United Arab Emirates 14/15

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II			
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SECTION 16: Other	information		
Full text of classifications [CLP/GHS]	: Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Aquatic Chronic 4 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Muta. 2 Skin Irrit. 2 Skin Sens. 1 STOT RE 2 STOT SE 3	ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Cate LONG-TERM (CHRONIC) AQUATIC HAZARD - Cate LONG-TERM (CHRONIC) AQUATIC HAZARD - Cate ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Catego SERIOUS EYE DAMAGE/EYE IRRITATION - Catego FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 GERM CELL MUTAGENICITY - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3	
<u>History</u> Date of issue/ Date of revision	: 22 February 2023		
Date of previous issue Prepared by	: 10 February 2022 : EHS		
Version	: 4.01		

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