SAFETY DATA SHEET

Date of issue/Date of revision : 15 March 2024 Version : 1.03



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

1.1 Product identifier

Product name : SIGMAFAST 278 BASE MIO DARK GREY

Product code : 000001183354

Product type : Liquid.
Other means of : 00437796

identification

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

Product use : Professional applications, Used by spraying.

Use of the substance/ :

mixture

: Coating.

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

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium

Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture
Classification according to UK CLP/GHS

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms







Signal word : Warning

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SECTION 2: Hazards identification

: Flammable liquid and vapour. **Hazard statements**

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Precautionary statements

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

Toxic to aquatic life with long lasting effects.

surfaces, sparks, open flames and other ignition sources. No smoking. Avoid

release to the environment. Avoid breathing vapour.

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

: Dispose of contents and container in accordance with all local, regional, national **Disposal**

and international regulations.

P280, P210, P273, P261, P391, P501

Supplemental label

elements

: Contains epoxy constituents. May produce an allergic reaction.

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

: Not applicable.

Special packaging requirements

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 according

to Regulation (EC) No. 1907/2006, Annex XIII

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

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

vPvB.

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Туре
propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥5.0 - ≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]

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SECTION 3: Composition/information on ingredients

SECTION 3. Compositi		ingredicints		
triiron tetraoxide	Index: 603-057-00-5 REACH #: 01-2119457646-28 EC: 215-277-5	≥1.0 - ≤5.0	Not classified.	[2]
Phenol, styrenated	CAS: 1317-61-9 EC: 262-975-0 CAS: 61788-44-1	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2,	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2	≥1.0 - ≤5.0	H411 Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
ethylbenzene	Index: 603-064-00-3 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	[1] [2]
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	REACH #: 01-2119485289-22 EC: 271-846-8 CAS: 68609-97-2 Index: 603-103-00-4	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Skin Sens. 1, H317	[1]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤1.0	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Octadecanamide, N, N'-1,6-hexanediylbis[12-hydroxy-	CAS: 55349-01-4	<1.0	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>I ype</u>

Inhalation

Skin contact

Ingestion

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

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

SUB codes represent substances without registered CAS Numbers.

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.

: 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.

: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

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SECTION 4: First aid measures

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

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.

Decomposition products may include the following materials:

Hazardous combustion products

carbon oxides

halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

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.

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SECTION 5: Firefighting measures

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.

: 15 March 2024

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with 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.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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SECTION 7: Handling and storage

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 wellventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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).

Occupational exposure limits

Product/ingredient name	Exposure limit values				
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p-				
	or mixed isomers] Absorbed through skin.				
	STEL: 441 mg/m³ 15 minutes.				
	STEL: 100 ppm 15 minutes.				
	TWA: 220 mg/m³ 8 hours.				
	TWA: 50 ppm 8 hours.				
triiron tetraoxide	EH40/2005 WELs (United Kingdom (UK), 9/2006).				
	WEL 15 min limit: 2 mg/m³, (As Fe) 15 minutes.				
	WEL 8 hrs limit: 1 mg/m³, (As Fe) 8 hours.				
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed				
1-metroxy-z-proparior	through skin.				
	STEL: 560 mg/m ³ 15 minutes.				
	STEL: 150 ppm 15 minutes.				
	TWA: 375 mg/m³ 8 hours.				
	TWA: 100 ppm 8 hours.				
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed				
•	through skin.				
	STEL: 552 mg/m ³ 15 minutes.				
	STEL: 125 ppm 15 minutes.				
	TWA: 441 mg/m³ 8 hours.				
	TWA: 100 ppm 8 hours.				

Biological exposure indices

Product/ingredient name	Exposure indices
x ylene	XYLENES

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.

DNELs/DMELs

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
bis-[4-(2,3-epoxipropoxi) phenyl]propane	DNEL	Long term Inhalation	12.25 mg/m³	Workers	Systemic
7 11 1	DNEL	Short term Inhalation	12.25 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	3.571 mg/kg bw/day	General	Systemic
				population	-,
				[Consumers]	
	DNEL	Short term Dermal	3.571 mg/kg bw/day	General	Systemic
	DIVLL	Chort term berman	3.57 Ting/kg bw/day	population	Cysterine
				[Consumers]	
	DNEL	Long term Oral	0.75 mg/kg bw/day	General	Systemic
	DIVEL	Long term Oral	0.75 mg/kg bw/day		Systernic
				population	
	DNIEL	Short torm Oral	0.75 mg/kg bw/dov	[Consumers]	Cuatamia
	DNEL	Short term Oral	0.75 mg/kg bw/day	General	Systemic
				population	
				[Consumers]	
	DNEL	Long term Dermal	89.3 μg/kg bw/day	General population	
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	
	DNEL	Long term Dermal	0.75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m ³	Workers	Systemic
xylene	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m³	General population	
	DNEL	Short term Inhalation	260 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	
berizyi alcorioi	DNEL	Long term Dermal	4 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	
	DNEL			Workers	
		Long term Dermal	8 mg/kg bw/day		Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
D	DNEL	Short term Inhalation	110 mg/m³	Workers	Systemic
Phenol, styrenated	DNEL	Long term Oral	0.75 mg/kg bw/day	General population	
	DNEL	Long term Dermal	0.75 mg/kg bw/day	General population	•
	DNEL	Long term Inhalation	1.31 mg/m³	General population	•
	DNEL	Long term Dermal	2.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	7.4 mg/m³	Workers	Systemic
1-methoxy-2-propanol	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43.9 mg/m³	General population	Systemic
	DNEL	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Systemic
ethylbenzene	DMEL	Long term Inhalation	442 mg/m³	Workers	Local
5.1.y1551125116	DMEL	Short term Inhalation	884 mg/m³	Workers	Systemic
	DNEL		1.6 mg/kg bw/day	General population	Systemic
		Long term Oral			
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
	DNEL	Long term Inhalation Long term Dermal	77 mg/m³ 180 mg/kg bw/day	Workers Workers	Systemic Systemic
	DNEL				

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SECTION 8: Exposure controls/personal protection

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	DNEL DNEL	Short term Inhalation Long term Oral	293 mg/m³ 0.5 mg/kg bw/day	Workers General population	Local Systemic
trizinc bis(orthophosphate)	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Dermal Long term Inhalation Long term Dermal Long term Inhalation Long term Oral Long term Inhalation Long term Inhalation Long term Dermal Long term Dermal	0.5 mg/kg bw/day 0.87 mg/m³ 1 mg/kg bw/day 3.6 mg/m³ 0.83 mg/kg bw/day 2.5 mg/m³ 5 mg/m³ 83 mg/kg bw/day 83 mg/kg bw/day	General population General population Workers Workers General population General population Workers General population Workers	Systemic Systemic Systemic Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Fresh water	0.006 mg/l	Assessment Factors
	Marine water	0.001 mg/l	Assessment Factors
	Fresh water sediment	0.996 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.1 mg/kg dwt	Equilibrium Partitioning
	Soil	0.196 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Secondary Poisoning	11 mg/kg	Assessment Factors
xylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg	-
1-methoxy-2-propanol	Fresh water	10 mg/l	Assessment Factors
	Marine water	1 mg/l	Assessment Factors
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Fresh water sediment	41.6 mg/kg	Equilibrium Partitioning
	Marine water sediment	4.17 mg/kg	Equilibrium Partitioning
	Soil	2.47 mg/kg	Equilibrium Partitioning
ethylbenzene	Fresh water	0.1 mg/l	Assessment Factors
·	Marine water	0.01 mg/l	Assessment Factors
	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	Secondary Poisoning	20 mg/kg	-
trizinc bis(orthophosphate)	Fresh water	20.6 µg/l	Sensitivity Distribution
	Marine water	6.1 µg/l	Sensitivity Distribution
	Sewage Treatment Plant	100 μg/l	Assessment Factors
	Fresh water sediment	117.8 mg/kg dwt	Sensitivity Distribution
	Marine water sediment	56.5 mg/kg dwt	Equilibrium Partitioning
	Soil	35.6 mg/kg dwt	Sensitivity Distribution

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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SECTION 8: Exposure controls/personal protection

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
Hand protection

: Chemical splash goggles.

: 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.

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.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.
Colour : Grey.

Odour : Aromatic. [Slight]
Odour threshold : Not available.

Melting point/freezing point : May start to solidify at the following temperature: 1597°C (2906.6°F) This is based

on data for the following ingredient: triiron tetraoxide. Weighted average: 98.78°C

(209.8°F)

Initial boiling point and boiling range

bonning range

: >37.78°C (>100°F)

Flammability (solid, gas) : liquid

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SECTION 9: Physical and chemical properties

: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol) Upper/lower flammability or

explosive limits

Flash point : Closed cup: 38°C (100.4°F)

Auto-ignition temperature

Ingredient name	°C	°F	Method
1-methoxy-2-propanol	270	518	

pН : Not applicable.

Not applicable. insoluble in water.

Viscosity : Kinematic (room temperature): >400 mm²/s

Kinematic (40°C): >21 mm²/s

Solubility(ies)

Media	Result
cold water	Not soluble

Miscible with water : No.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure

	Vapour Pressure at 20°C			Vap	our pressui	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
ethylbenzene	9.30076	1.2				

Relative density 1.72

Vapour density Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane).

Weighted average: 8.35 (Air = 1)

: The product itself is not explosive, but the formation of an explosible mixture of **Explosive properties**

: Product does not present an oxidizing hazard.

vapour or dust with air is possible.

Oxidising properties

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

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.

: Depending on conditions, decomposition products may include the following 10.6 Hazardous materials: carbon oxides halogenated compounds metal oxide/oxides decomposition products

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SECTION 11: Toxicological information

11.1 Information on toxicological effects <u>Acute toxicity</u>

Product/ingredient name	Result	Species	Dose	Exposure
bis-[4-(2,3-epoxipropoxi)	LD50 Dermal	Rabbit	23000 mg/kg	-
phenyl]propane	I DE0 01	Det	15000 mm m/lcm	
	LD50 Oral	Rat	15000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>4178 mg/m³	4 hours
	mists			
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
triiron tetraoxide	LC50 Inhalation Dusts and	Rat	>5.05 mg/l	4 hours
	mists			
	LD50 Oral	Rat	>5000 mg/kg	-
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	3550 mg/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	_
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	_
oxirane, mono[LD50 Oral	Rat	17100 mg/kg	
(C12-14-alkyloxy)methyl]	LD30 Oral	Ital	17 Too mg/kg	
derivs.				
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and	Rat	>5.7 mg/l	4 hours
	mists	Trat	- 0.7 mg/i	TIDUIS
	LD50 Oral	Rat	>5000 mg/kg	
	LD30 Olai	Ival	- Jood Hig/kg	-

Conclusion/Summary Acute toxicity estimates

: There are no data available on the mixture itself.

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMAFAST 278 BASE MIO DARK GREY	49447.2	29859.8	N/A	174.0	60.3
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
xylene	4300	1700	N/A	11	N/A
benzyl alcohol	1230	N/A	N/A	N/A	1.5
Phenol, styrenated	3550	N/A	N/A	N/A	N/A
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100	N/A	N/A	N/A	N/A

Irritation/Corrosion

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

Conclusion/Summary

: Not available.

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

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SECTION 11: Toxicological information

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
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitising
Phenol, styrenated oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	skin skin	Mouse 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

Carcinogenicity

: There are no data available on the mixture itself.

Conclusion/Summary

Reproductive toxicity

: There are no data available on the mixture itself.

Conclusion/Summary

Teratogenicity

: There are no data available on the mixture itself.

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

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
xylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

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SECTION 11: Toxicological information

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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.

Conclusion/Summary: Not available.

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

or dermatitis. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi)	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
phenyl]propane			
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
triiron tetraoxide	Acute LC50 10000 mg/l	Fish	96 hours
Phenol, styrenated	Acute EC50 3.8 mg/l	Daphnia	48 hours
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia - Daphnia	48 hours
, , ,	Acute LC50 >4500 mg/l Fresh water	Fish - Goldfish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	_
oxirane, mono[LC50 >100 mg/l	Fish - Trout	96 hours
(C12-14-alkyloxy)methyl]			
derivs.			
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l	Fish	96 hours
	Chronic NOEC 0.026 mg/l	Fish	30 days

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Phenol, styrenated	OECD 301F	7 % - Not readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

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SECTION 12: Ecological information

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	-	Not readily
xylene benzyl alcohol	-	-	Readily Readily
Phenol, styrenated ethylbenzene	-	-	Not readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
benzyl alcohol	0.87	-	Low
1-methoxy-2-propanol	<1	-	Low
ethylbenzene	3.6	79.43	Low
oxirane, mono[3.77	-	Low
(C12-14-alkyloxy)methyl]			
derivs.			

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

Waste catalogue

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	Waste catalogue	
Container	15 01 06	mixed packaging

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SECTION 13: Disposal considerations

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	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(bis-[4- (2,3-epoxipropoxi) phenyl]propane)	Not applicable.

Additional information

ADR/RID : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and

4.1.1.4 to 4.1.1.8 according to 2.2.3.1.5.2.

Tunnel code : (D/E)

ADN : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in

packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and

4.1.1.4 to 4.1.1.8 according to 2.2.3.1.5.2.

: This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in **IMDG**

packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and

4.1.1.4 to 4.1.1.8 according to 2.3.2.5.

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

regulations.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to IMO

instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/REACH**

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

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SECTION 15: Regulatory information

None of the components are listed.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category P5c

E2

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

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

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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SECTION 16: Other information

Full text of classifications

Acute Tox. 4
Aquatic Acute 1
Aquatic Chronic 1
Aquatic Chronic 2
Aquatic Chronic 3
Aquatic Chronic 3
Aquatic Chronic 4
ACUTE TOXICITY - Category 4
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4

Asp. Tox. 1 ASPIRATION HAZARD - Category 1

Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

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

Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1B SKIN SENSITISATION - Category 1B

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History

Date of issue/ Date of

Date of previous issue

revision

Prepared by : EHS Version : 1.03

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