C123A

SAFETY DATA SHEET

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

1.1 Product identifier

Product name : MACROPOXY C123 Epoxy Glass Flake - Additive

Product code : C123A

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

Material uses : Paint or paint related material.

: Industrial use only.

1.3 Details of the supplier of the safety data

sheet

Sherwin-Williams UK Limited - Protective & Marine

Coatings Division EMEAI

Tower Works Kestor Street Bolton BL2 2AL

United Kingdom +44 (0) 1204 521771

The Sherwin-Williams Company Inver France SAS 2 Rue Jean Revaus - BP 80088 - 79102

Thouars CEDEX

France

e-mail address of person responsible for this SDS

: hse.pm.emea@sherwin.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : 111 (general public) /0344 892 111 (Medical professional (NHS) only)

<u>Supplier</u>

Telephone number : +(44)-870-8200 418

Hours of operation : Emergency contact available 24 hours a day

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 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400

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SECTION 2: Hazards identification

Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

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

2.2 Label elements

Hazard pictograms











Signal word Danger

Hazard statements Flammable liquid and vapour.

Harmful if swallowed.

May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves, protective clothing and eye or face protection. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Avoid release to the environment. Do not breathe vapour.

Response : Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor.

: Not applicable. Storage Disposal : Not applicable.

Hazardous ingredients : Amino Polymer

> Xvlene, mixed isomers Phenol, 4-Nonyl-, Branched Methylenedicyclohexylamine

Supplemental label

elements

: FOR INDUSTRIAL USE ONLY

Special packaging requirements

Not applicable.

2.3 Other hazards

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

vPvB.

Other hazards which do not result in classification This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f),

Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU)

2017/2100.

SECTION 3: Composition/information on ingredients

3.2 Mixture

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SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Amino Polymer	REACH #: 01-2119983522-33 CAS: 135108-88-2	≥25 - ≤50	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg	[1]
Phenylmethanol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥25 - ≤50	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 1230 mg/kg ATE [Inhalation (vapours)] = 11 mg/	[1]
Xylene, mixed isomers	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - <20	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 6700 ppm	[1] [2]
Phenol, 4-Nonyl-, Branched	REACH #: 01-2119510715-45 EC: 284-325-5 CAS: 84852-15-3	≥10 - ≤25	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361 (oral) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/kg M [Acute] = 10 M [Chronic] = 10	[1] [3]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≤10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/kg	[1]
Methylenedicyclohexylamine		≤5	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 (oral)	ATE [Oral] = 500 mg/kg	[1]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	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)] = 11 mg/	[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.

<u>Type</u>

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SECTION 3: Composition/information on ingredients

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give

anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

4.3 Indication of any immediate 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.

Specific treatments: No specific treatment.

See toxicological information (Section 11)

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Recommended: alcohol-resistant foam, CO2, powders, water spray or mist.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may

cause a health hazard.

Hazardous combustion

products

: Decomposition products may include the following materials: carbon monoxide,

carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to

drains or watercourses.

Special protective equipment for fire-fighters

: Fire-fighters should wear positive pressure self-contained breathing apparatus

(SCBA) and full turnout gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.

Refer to protective measures listed in sections 7 and 8.

For emergency responders

Keep unnecessary and unprotected personnel from entering.

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

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local

regulations.

6.3 Methods and material for containment and cleaning up

: 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 (see Section 13). Preferably clean with a detergent.

Avoid using solvents.

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

: Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

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SECTION 7: Handling and storage

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Contaminated absorbent material may pose the same hazard as the spilt product. Store in closed original container at temperatures between 5°C and 25°C.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Xylene, mixed isomers	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin.
	STEL: 441 mg/m³ 15 minutes.
	TWA: 50 ppm 8 hours.
	TWA: 220 mg/m³ 8 hours.
	STEL: 100 ppm 15 minutes.
Ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

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SECTION 8: Exposure controls/personal protection

through skin.	_
STEL: 552 mg/m³ 15 minutes.	
STEL: 125 ppm 15 minutes.	
TWA: 100 ppm 8 hours.	
TWA: 441 mg/m³ 8 hours.	

Biological exposure indices

Product/ingredient name	Exposure indices
	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-,
	m-, p- or mixed isomers] BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine].
	Sampling time: post shift.

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.
- : Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Xylene, mixed isomers	DNEL	Long term Dermal	212 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
				population	
	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	289 mg/m ³	Workers	Systemic
	DNEL	Inhalation Short term	442 m a/m³	Workers	Local
	DINEL	Inhalation	442 mg/m ³	VVOIKEIS	Local
	DNEL	Long term	65.3 mg/m ³	General	Systemic
	DIVLL	Inhalation	00.0 mg/m	population	Cysternic
	DNEL	Short term	260 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	174 mg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term Oral	1.5 mg/kg	General	Systemic
				population	
2,4,6-tris(dimethylaminomethyl)	DNEL	Long term	0.53 mg/m ³	Workers	Systemic
phenol	DAIE	Inhalation	0.4	NA / I	01
	DNEL	Short term	2.1 mg/m ³	Workers	Systemic
	DNEL	Inhalation Long term Dermal	0.15 mg/kg	Workers	Systemic
	DNEL	Short term Dermal	0.13 mg/kg 0.6 mg/kg	Workers	Systemic
	DNEL	Long term		General	Systemic
		Inhalation	0.10 1119/111	population	Cycloniic
	DNEL	Short term	0.13 mg/m ³	General	Systemic
		Inhalation		population	'
	DNEL	Long term Dermal	0.075 mg/	General	Systemic
			kg	population	
	DNEL	Short term Dermal	0.075 mg/	General	Systemic
	L		kg	population	
	DNEL	Long term Oral	0.075 mg/	General	Systemic
			kg	population	

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SECTION 8: Exposure controls/personal protection

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2,4,6-tris(dimethylaminomethyl)phenol		0.046 mg/l	-
		0.005 mg/l 0.262 mg/l	-
	Plant		
	Soil	0.025 mg/kg	-

8.2 Exposure controls

Appropriate engineering controls

- : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
- : Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Hand protection Gloves

: Use safety eyewear designed to protect against splash of liquids.

- : Wear suitable gloves tested to EN374.
- : Gloves for term exposure/splash protection (less than 10 min):Nitrile>0.12 mm Gloves for splash protection need to be changed immediately when in contact with chemicals.

Gloves for repeated or prolonged exposure (breakthrough time > 240 min.) When the hazardous ingredients in Section 3 contain any of the following: Aromatic solvents (Xylene, Toluene) or Aliphatic solvents or Mineral Oil use: Polyvinyl alcohol (PVA) gloves 0.2-0.3 mm Otherwise use: Butyl gloves >0.3 mm For long term exposure or spills (breakthrough time >480 min.): Use PE laminated gloves as under gloves

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.

The recommendation for the type or types of glove to usewhen handling this product is based on information from the following source: Solvent resin manufacturers and European Solvents Industry Group (ESIG).

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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.

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SECTION 8: Exposure controls/personal protection

Body protection

- Personnel should wear antistatic clothing made of natural fibres or of hightemperature-resistant synthetic fibres.
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

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

Respiratory protection

: Application methods:

Brush or roller. Approved/certified respirator with organic vapour cartridge. Filter type:

A2 P2 (EN14387).

Manual spraying. 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

: Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

SECTION 9: Physical and chemical properties

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

: Not relevant/applicable due to nature of the product.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour Colourless. Odour : Paint

: Not Available (Not Tested). Odour threshold

: Not relevant/applicable due to nature of the product. pН

insoluble in water.

Melting point/freezing point

Initial boiling point and

boiling range

: 136°C

: Closed cup: 41°C [Pensky-Martens Closed Cup] Flash point

: 0.8 (butyl acetate = 1) Evaporation rate **Flammability** : Flammable liquid.

Lower and upper explosion : LEL: 1% (Xylene, mixed isomers)

limit

UEL: 13% (Phenylmethanol)

Vapour pressure : 0.95 kPa (7.1 mm Hg)

Relative vapour density : 3.66 [Air = 1]

Relative density : 0.99

Solubility(ies) Media Result Not soluble cold water

Partition coefficient: n-octanol/: Not relevant/applicable due to nature of the product.

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SECTION 9: Physical and chemical properties

Auto-ignition temperature

Ingredient name	°C	°F	Method
Phenylmethanol	436	816.8	

Decomposition temperature

: Not relevant/applicable due to nature of the product.

Viscosity

: Kinematic (40°C): <20.5 mm²/s

Explosive properties
Oxidising properties
Particle characteristics

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

Particle characteristics

Median particle size

: Not relevant/applicable due to nature of the product.

9.2 Other information

Heat of combustion : 19.457 kJ/g

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 : Stable under recommended storage and handling conditions (see Section 7).

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.

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

Decomposition products may include the following materials: carbon monoxide,

carbon dioxide, smoke, oxides of nitrogen.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

Acute toxicity

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SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Phenylmethanol	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Phenol, 4-Nonyl-, Branched	LD50 Oral	Rat	1300 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	922.1 mg/kg
Dermal	8161.29 mg/kg
Inhalation (gases)	49709.66 ppm
Inhalation (vapours)	33.34 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phenylmethanol	Skin - Mild irritant	Man	-	48 hours 16	-
				mg	
	Skin - Moderate irritant	Pig	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Phenol, 4-Nonyl-, Branched	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 500	-
				mg	
2,4,6-tris	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
(dimethylaminomethyl) phenol				ug	
	Skin - Mild irritant	Rat	-	0.025 MI	-
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
				mg	
	Skin - Severe irritant	Rat	-	0.25 MI	-
Methylenedicyclohexylamine	Eyes - Severe irritant	Rabbit	-	24 hours 10	-
	_			uL	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
_	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	

Conclusion/Summary

: Not available.

Sensitisation

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SECTION 11: Toxicological information

No data available

Conclusion/Summary

: Not available.

Mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Amino Polymer	Category 2	oral	-
Xylene, mixed isomers	Category 2	-	-
Methylenedicyclohexylamine	Category 2	oral	-
Ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result	
Xylene, mixed isomers Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1	

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

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

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SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Phenylmethanol	Acute LC50 10 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
Xylene, mixed isomers	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes	48 hours
		pugio	
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Phenol, 4-Nonyl-, Branched	Acute EC50 0.03 mg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 0.027 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 17 μg/l Marine water	Fish - <i>Pleuronectes americanus</i>	96 hours
		- Larvae	
	Chronic EC10 0.012 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Chronic NOEC 5 µg/l Fresh water	Crustaceans - Gammarus	21 days
		fossarum - Adult	
	Chronic NOEC 7.4 µg/l Fresh water	Fish - Pimephales promelas -	33 days
		Embryo	
Ethylbenzene	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp	48 hours
		Nauplii	
	Acute EC50 2.93 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours
		Neonate	
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
No data available				

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Phenylmethanol	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	Low
Phenol, 4-Nonyl-, Branched	-	740	High

12.4 Mobility in soil

Soil/water partition

: Not available.

coefficient (Koc)

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

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

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SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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 paint and varnish containing organic solvents or other hazardous substances

08 01 11*

Disposal considerations

: Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

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.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

European waste catalogue (EWC)

 packaging containing residues of or contaminated by hazardous substances 15 01 10*

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE. Marine pollutant (Phenol, 4-Nonyl-, Branched)	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
14.3 Transport Hazard Class(es)/ Label(s)	3 (8)	3 (8)	3 (8)
14.4 Packing group	III	III	III

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SECTION 14: Transport information

14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code D/E	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-C	The environmentally hazardous substance mark may appear if required by other transportation 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 Maritime transport in bulk according to IMO

: Not applicable.

instruments

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
Phenol, 4-Nonyl-, Branched	Endocrine disrupting properties for environment	Candidate	ED/169/2012	12/19/2012

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

Product/ingredient name	%	Designation [Usage]
MACROPOXY C123 Epoxy Glass Flake - Additive	≥90	3
Phenol, 4-nonyl-, branched	≥10 - ≤25	46
toluene	≤0.1	48

Labelling : Not applicable.

Other EU regulations

VOC content (2010/75/EU) : 46.5 w/w

461 g/l

Explosive precursors : Not applicable. Prior Informed Consent (PIC) (649/2012/EU)

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SECTION 15: Regulatory information

Annex	Ingredient name	Status
Annex I - Part 1	Nonylphenols	Listed
Annex I - Part 2	Nonylphenols	Listed

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

15.2 Chemical safety

assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

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

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

N/A = Not available

Key literature references and sources for data

: Regulation (EC) No. 1272/2008 [CLP]

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

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

Commission Regulation (EU) 2020/878

Directive 2012/18/EU, and relative amendments & additions Directive 2008/98/EC, and relative amendments & additions Directive 2009/161/EU, and relative amendments & additions

CEPE Guidelines

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 2, H361	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full	text	of	abb	rev	iated	Η
stat	emei	nts				

: 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.

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.

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SECTION 16: Other information		
	H318	Causes serious eye damage.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H361	Suspected of damaging fertility or the unborn child.
	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.
	H412	Harmful to aquatic life with long lasting effects.
Full text of classifications	: Acute Tox. 4	ACUTE TOXICITY - Category 4
[CLP/GHS]	Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
	Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
	Aquatic Chronic 3	
	Asp. Tox. 1	ASPIRATION HAZARD - Category 1
	Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
	Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
	Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
	Repr. 2	REPRODUCTIVE TOXICITY - Category 2
	Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
	Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
	Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
	Skin Sens. 1	SKIN SENSITISATION - Category 1
	STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 15, Apr, 2024.

Date of issue/ Date of

revision

: 15, Apr, 2024

Date of previous issue : 08, Nov, 2023

: If there is no previous validation date please contact your supplier for more

information.

Version : 15.01

Notice to reader

In accordance with Regulation (EC) 1907/2006, REACH Regulation, Articles 31, 37, any required hazard-related information on the use of substances received as downstream user will be sent forward. Consequently, the safety data sheets for some products will contain a SUMI - Safe Use of Mixture Information - attached to the safety data sheet.

SUMI(s) will be added to the SDS for products if both the following conditions are met:

- The product is classified as hazardous for health
- The product contains one or more REACH-registered substances for which extended safety data sheets (exposure scenarios) have been provided

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SECTION 16: Other information

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become make themselves aware of and understand the data contained in this SDS and any hazards that may be associated with the product. This information is provided in good faith and believed to be accurate as of the effective date mentioned herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can may change later the composition, hazards and risks of the product. Products shall should not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to, the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for the use of the product are not under the manufacturer's control of the manufacturer; the customer/buyer/user is responsible to for determine determining the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS, without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be held responsible for SDSs obtained from any other source.

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