SAFETY DATA SHEET

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

1.1 Product identifier	
Product name	: MACROPOXY M111 Epoxy Wet Blast Primer - Additive
Product code	: M111A
1.2 Polovant identified use	es 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 sheet	of the safety data
Sherwin-Williams UK Limite Coatings Division EMEAI Tower Works Kestor Street Bolton BL2 2AL United Kingdom	ed - Protective & Marine
+44 (0) 1204 521771	
The Sherwin-Williams Com Inver France SAS 2 Rue Jean Revaus - BP 80 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/P	
Telephone number	: 22 59 13 00
<u>Supplier</u>	
	· +/44) 970 9200 419
Telephone number	: +(44)-870-8200 418
Hours of operation	: Emergency contact available 24 hours a day
SECTION 2: Hazards id	dentification
2.1 Classification of the su	ibstance or mixture
Product definition	: Mixture
	to Regulation (EC) No. 1272/2008 [CLP/GHS]
Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	
Date of issue/Date of revision	: 15, Apr, 2024 Date of previous issue : 17, Sep, 2023 Version : 17

1/19

SHW-A4-EU-CLP44-NO

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

MACROPOXY M111 Epoxy Wet Blast Primer - Additive M111A

SECTION 2: Hazards identification

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	 Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Do not breathe vapor.
Response	: Collect spillage. IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	 Polyamidoamine Methyl Ethyl Ketone Xylene, mixed isomers 2,4,6-tris(dimethylaminomethyl)phenol Amines, polyethylenepoly-, triethylenetetramine fraction
Supplemental label elements	: FOR INDUSTRIAL USE ONLY
Special packaging requiren	nents

Not applicable.

2.3 Other hazards

z.o other nazaras	
	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

:

3.2 Mixture

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II MACROPOXY M111 Epoxy Wet Blast Primer - Additive

M111A

SECTION 3: Composition/information on ingredients

				Specific Conc.	_
Product/ingredient name	Identifiers	%	Classification	Limits, M-factors and ATEs	Туре
Polyamidoamine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
Methyl Ethyl Ketone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≥25 - ≤50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	-	[1] [2]
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]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤5	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/ I	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	<5	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/kg	[1]
Amines, polyethylenepoly-, triethylenetetramine fraction	REACH #: 01-2119487919-13 EC: 292-588-2 CAS: 90640-67-8 Index: 612-065-00-8	<1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg	[1]
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	-	[1] [2]

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>

[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.

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 recognized skin cleanser. Do NOT use solvents or thinners. 		
Ingestion	 If swallowed, seek medical advice immediately and show this 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 vapor 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 polyethlyenepolyamines. 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.

media

See toxicological information (Section 11)			
SECTION 5: Firefighting measures			
5.1 Extinguishing media Suitable extinguishing media	: Recommended: alcohol-resistant foam, CO ₂ , powders, water spray or mist.		
Unsuitable extinguishing	: Do not use water jet.		

5.2 Special hazards arising from the substance or mixture

Date of issue/Date of revision	: 15, Apr, 2024	Date of previous issue	:17, Sep, 2023	Version : 17

4/19

M111A

SECTION 5: Firefighting measures

:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
	:

Special protective	: Fire-fighters should wear positive pressure self-contained breathing apparatus
equipment for fire-fighters	(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 vapor or mist. Refer to protective measures listed in sections 7 and 8.
		Keep unnecessary and unprotected personnel from entering.
For emergency responders	:	If specialized 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 materials 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).

Do not allow to enter drains or watercourses.	7.1 Precautions for safe handling	 Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor 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 used. 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.
---	--------------------------------------	---

Date of issue/Date of revision	: 15, Apr, 2024	Date of previous issue	:17, Sep, 2023	Version : 17	5/19
				SHW-A4-EU-CLP44-NO	

SECTION 7: Handling and storage

U	Leferment and fire and comber to strate a
	Information on fire and explosion protection Vapors are heavier than air and may spread along floors. Vapors 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 vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have 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: oxidizing 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 unauthorized 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 spilled 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.

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

solutions

Occupational exposure limits

Product/ingredient name	Exposure limit values
Methyl Ethyl Ketone	FOR-2011-12-06-1358 (Norway, 12/2022). Notes: indicative limit value TWA: 75 ppm 8 hours.
Xylene, mixed isomers	TWA: 220 mg/m ³ 8 hours. FOR-2011-12-06-1358 (Norway, 12/2022). [Xylene, all isomers] Absorbed through skin. Notes: indicative limit value TWA: 25 ppm 8 hours.
Ethylbenzene	TWA: 108 mg/m ³ 8 hours. FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Carcinogen. Notes: indicative limit value TWA: 5 ppm 8 hours.
Toluene	TWA: 20 mg/m ³ 8 hours. FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value TWA: 25 ppm 8 hours. TWA: 94 mg/m ³ 8 hours.

Date of issue/Date of revision : 15, Apr, 2024 Date of previous issue : 17, Sep, 2023 Version : 17 SHW-A4-EU-CLP44-NO

MACROPOXY M111 Epoxy Wet Blast Primer - Additive

M111A

SECTION 8: Exposure controls/personal protection

No exposure indices known.

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	Туре	Exposure	Value	Population	Effects
Methyl Ethyl Ketone	DNEL	Long term Dermal	1161 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term	600 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	412 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
	DNEL	Long term	106 mg/m³	General	Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Oral	31 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
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/m³	Workers	Systemic
		Inhalation			
	DNEL	Short term	442 mg/m³	Workers	Local
		Inhalation			
	DNEL	Long term	65.3 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Short term	260 mg/m³	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		Inhalation			
	DNEL	Short term	2.1 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	0.15 mg/kg	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg	Workers	Systemic
	DNEL	Long term	0.13 mg/m ³	General	Systemic
		Inhalation	0 10 / 3	population	Overte re-!-
	DNEL	Short term	0.13 mg/m ³	General	Systemic
		Inhalation	0.075	population	0
	DNEL	Long term Dermal	0.075 mg/	General	Systemic
			kg	population	Ou un training in the
	DNEL	Short term Dermal	0.075 mg/	General	Systemic
			kg	population	

	DNEL	Long term Oral	0.075 mg/	General	Systemic
		_	kg	population	-
Toluene	DNEL	Short term	226 mg/m ³	General	Systemic
		Inhalation		population	
				[Human via the	
				environment]	
	DNEL	Short term	226 mg/m³	General	Local
		Inhalation		population	
				[Human via the	
				environment]	
	DNEL	Long term Dermal	226 mg/m³	General	Systemic
				population	
				[Human via the	
				environment]	
	DNEL	Long term	226 mg/kg	General	Systemic
		Inhalation	bw/day	population	
				[Human via the	
				environment]	
	DNEL	Long term	56.5 mg/m³	General	Systemic
		Inhalation		population	
				[Human via the	
	DNEL	Long torm Oral	8.13 mg/	environment] General	Svotomio
	DNEL	Long term Oral	kg bw/day		Systemic
			kg bw/uay	population [Human via the	
				environment]	
	DNEL	Long term	192 mg/m³	Workers	Systemic
		Inhalation	1.52 mg/m		Cystonii C
	DNEL	Long term	192 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	384 mg/m³	Workers	Systemic
		Inhalation	<u> </u>		,
	DNEL	Short term	384 mg/m³	Workers	Local
		Inhalation	Ŭ		
	DNEL	Long term Dermal	384 mg/kg	Workers	Systemic
			bw/day		-
	DNEL	Long term	56.5 mg/m ³	General	Local
		Inhalation	l Č	population	
				[Consumers]	

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Methyl Ethyl Ketone	Fresh water	55.8 mg/l	-
	Marine water	55.8 mg/l	-
	Sewage Treatment	709 mg/l	-
	Plant		
	Sediment	284.7 mg/kg dwt	-
	Soil	22.5 mg/kg	-
	Secondary Poisoning	1000 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0.046 mg/l	-
	Marine water	0.005 mg/l	-
	Sewage Treatment	0.262 mg/l	-
	Plant		
	Soil	0.025 mg/kg	-
Foluene	Fresh water sediment	0.68 mg/l	Assessment Factors
	Marine water sediment	0.68 mg/l	Assessment Factors
	Sewage Treatment	13.61 mg/l	Assessment Factors
	Plant		
	Soil	2.89 mg/kg	Assessment Factors
	Fresh water sediment	16.39 mg/kg dwt	-
te of issue/Date of revision : 15, Apr, 2024	Date of previous issue	:17, Sep, 2023	Version : 17 8/1
			SHW-A4-EU-CLP44-NO

SECTION 8: Exposure controls/personal protection				
	Marine water sediment 16.39 mg/kg dwt -			
3.2 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 vapors below the OEL, suitable respiratory protection must be worn.			
	: Users are advised to consider national Occupational Exposure Limits or other equivalent values.			
Individual protection meas	<u>ures</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	: Use safety eyewear designed to protect against splash of liquids.			
Skin protection				
Hand protection	: Wear suitable gloves tested to EN374.			
Gloves	: Gloves for short 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 alcoho (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 use when 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/chemica 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.			
Body protection	: Personnel should wear antistatic clothing made of natural fibers or of high- temperature-resistant synthetic fibers.			

SECTION 8: Exposure controls/personal 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 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	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387). 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.
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.

9.1 Information on basic physical and chemical properties

cold water	Not soluble
Media	Result
Solubility(ies)	:
Relative density	: 0.89
Relative vapor density	: 2.48 [Air = 1]
Vapor pressure	: 12.1 kPa (90.6 mm Hg)
Lower and upper explosion limit	: LEL: 1% (Xylene, mixed isomers) UEL: 10% (Methyl Ethyl Ketone)
Flammability	: Flammable liquid.
Evaporation rate	: 5.6 (butyl acetate = 1)
Flash point	Closed cup: 9°C [Pensky-Martens Closed Cup]
boiling range	
Initial boiling point and	: 78°C
Melting point/freezing point	Not relevant/applicable due to nature of the product.
рH	 Not relevant/applicable due to nature of the product. insoluble in water.
Odor threshold	Not Available (Not Tested).
Odor	: Paint
Color	: Colorless.
Physical state	: Liquid.
Appearance	

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

1

water

Auto-ignition temperature

SECTION 9: Physical and chemical properties Ingredient name °C °F Method Methyl Ethyl Ketone 475 887 Decomposition temperature : Not relevant/applicable due to nature of the product. : Kinematic (40°C): <20.5 mm²/s Viscosity Explosive properties : Under normal conditions of storage and use, hazardous reactions will not occur. : Under normal conditions of storage and use, hazardous reactions will not occur. **Oxidizing properties** Particle characteristics Median particle size : Not relevant/applicable due to nature of the product. 9.2 Other information Heat of combustion : 16.633 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 : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions 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: oxidizing agents, strong alkalis, strong acids. 10.6 Hazardous : Decomposition products may include the following materials: carbon monoxide, decomposition products 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 vapor 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 polyethlyenepolyamines. May produce an allergic reaction.

Acute toxicity

SHW-A4-EU-CLP44-NO

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	26278.3 mg/kg
Dermal	7647.51 mg/kg
Inhalation (gases)	46580.3 ppm
Inhalation (vapors)	225.91 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl Ethyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				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	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	
2,4,6-tris	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
(dimethylaminomethyl)				ug	
phenol				-9	
	Skin - Mild irritant	Rat	-	0.025 MI	-
	Skin - Severe irritant	Rabbit	_	24 hours 2	-
				mg	
	Skin - Severe irritant	Rat	_	0.25 MI	-
Toluene	Eyes - Mild irritant	Rabbit	_	0.5 minutes	-
		T GODIC		100 mg	
	Eyes - Mild irritant	Rabbit	-	870 ug	-
	Eyes - Severe irritant	Rabbit		24 hours 2	_
		Tabbit		mg	
	Skin - Mild irritant	Pig	-	24 hours 250	
		' 'Y	_	uL	-
				uL	
te of issue/Date of revision : :	15, Apr, 2024 Date of p	revious issue : 17,	Sep, 2023	Version	:17 12

SECTION 11: Toxicological information

	gical information				
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Skin - Moderate irritant	Dabbit		mg	
	Skin - Moderale Imlant	Rabbit	-	500 mg	-
Conclusion/Summary	: Not available.				
<u>Sensitization</u>					
No data available					
Conclusion/Summary	: Not available.				
<u>Mutagenicity</u>					
No data available					
0					
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
Methyl Ethyl Ketone Xylene, mixed isomers	Category 3 Category 3	-	Narcotic effects Respiratory tract
Toluene	Category 3	-	irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-
Ethylbenzene	Category 2	-	hearing organs
Toluene	Category 2	-	-

Aspiration hazard

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

SHW-A4-EU-CLP44-NO

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.

Product/ingredient name	Result	Species	Exposure
Methyl Ethyl Ketone	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - <i>Palaemonetes</i> pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
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 - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Toluene	Acute EC50 >433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 μg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Daphnia magna	21 days

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		Biodeg	radability
Methyl Ethyl Ketone Xylene, mixed isomers Ethylbenzene Toluene	- - -		- - -		Readily Readily Readily Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene, mixed isomers		8.1 to 25.9	Low
Toluene		90	Low

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

Date of issue/Date of revision : 15, Apr, 2024

Date of previous issue : 17, Sep, 2023

SECTION 12: Ecological information

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.

SECTION 13: Disposal considerations					
•					
13.1 Waste treatment method Product	us				
Methods of disposal	:	The generation of waste should be avoided or minimized 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.			
<u>Packaging</u>					
Methods of disposal	:	The generation of waste should be avoided or minimized 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. Vapor 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 spilled 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 RELATED MATERIAL	PAINT RELATED MATERIAL. Marine pollutant (Polyamidoamine)	PAINT RELATED MATERIAL
Date of issue/Date of revi	sion : 15, Apr, 2024 D	ate of previous issue : 17, Sep, 2023	Version : 17 15/19 SHW-A4-EU-CLP44-NO

M111A

SECTION 14: Transport information

14.3 Transport Hazard Class(es)/ Label(s)			3			
14.4 Packing group	11	Ш	11			
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. <u>Special provisions</u> 640 (C) <u>Tunnel code</u> D/E	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-E, S-E	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 : Not applicable.

bulk according to IMO 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 authorization

Annex XIV

None of the components are listed.

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

Product/ingredien	t name	%	Designation [Usage]
MACROPOXY M1 ² toluene	11 Epoxy Wet Blast Primer - Additive	≥90 <1	3 48
Labeling	: Not applicable.		

Other EU regulations

VOC content	:	48.7	w/w
		435	g/l

Explosive precursors : Not applicable.

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

SECTION 15: Regulatory information

	<i>Product/ingredient name</i> Ethylbenzene	<i>List name</i> Norway Occupational Exposure Limits	<i>Name on list</i> etylbenzen	<i>Classification</i> Carc. K	Notes -
15	.2 Chemical Safety	: No Chemical Safety A	ssessment has been ca	rried out.	

Assessment

SECTION 16: Other information

Indi	cates	informatior	n that has	change	d fro	m pi	reviou	Jsly	issı	ued v	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]

Clas	sification	Justification
Flam. Liq. 2, H225		On basis of test data
Skin Irrit. 2, H315		Calculation method
Eye Dam. 1, H318		Calculation method
Skin Sens. 1, H317		Calculation method
STOT SE 3, H336		Calculation method
STOT RE 2, H373		Calculation method
Asp. Tox. 1, H304		Calculation method
Aquatic Chronic 2, H411		Calculation method
Full text of abbreviated H	: H225	Highly flammable liquid and vapor.
statements	H226	Flammable liquid and vapor.
	H302	Harmful if swallowed.
	H304	May be fatal if swallowed and enters airways.
	H312	Harmful in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
	H361d	Suspected of damaging the unborn child.
	H373	May cause damage to organs through prolonged or repeated
Date of issue/Date of revision	: 15, Apr, 2024	Date of previous issue : 17, Sep, 2023 Version : 17 17/19
		SHW-A4-EU-CLP44-NO

M111A

SECTION 16: Other information

	exposure.
	H411Toxic to aquatic life with long lasting effects.H412Harmful to aquatic life with long lasting effects.EUH066Repeated exposure may cause skin dryness or cracking.
Full text of classifications [CLP/GHS]	 Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Repr. 2 Skin Corr. 1B Skin Corr. 1C Skin Sens. 1 Skin Sens. 1 SKIN SENSITIZATION - Category 1 Stot RE 2 Stot RE 3 Stot Set 3 Stot Set 3
Date of printing	: 15, Apr, 2024.
Date of issue/ Date of revision	: 15, Apr, 2024
Date of previous issue	: 17, Sep, 2023
	 If there is no previous validation date please contact your supplier for more information.
Version	: 17

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

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 aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date 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 change the composition, hazards and risks of the product. Products shall 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 use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine 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 responsible for SDSs obtained from any other source.