SAFETY DATA SHEET

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

1/17

:

SECTION 2: Hazards identification

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 drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor.
Response	: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	: Toluene
Supplemental label elements	 Contains epoxy constituents. May produce an allergic reaction. FOR INDUSTRIAL USE ONLY
Special packaging requirem	<u>ients</u>
Not applicable.	
<u>2.3 Other hazards</u>	
	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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥25 - ≤50	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	-	[1] [2]
Date of issue/Date of revision	: 15, Apr, 2024	Date of previo	ous issue : 17, Sep, 2023	Version : 8	2/
				SHW-A4-EU-CLP44-	UA

SECTION 3: Composition/information on ingredients

2-Propanol	REACH #:	<10	Flam. Liq. 2, H225	-	[1]
-	01-2119457558-25		Eye Irrit. 2, H319		
	EC: 200-661-7		STOT SE 3, H336		
	CAS: 67-63-0				
	Index: 603-117-00-0				
4,4'-Isopropylidenediphenol	REACH #:	<0.1	Eye Dam. 1, H318	M [Acute] = 1	[1] [2]
	01-2119457856-23		Skin Sens. 1, H317	M [Chronic] = 10	[3]
	EC: 201-245-8		Repr. 1B, H360F		
	CAS: 80-05-7		STOT SE 3, H335		
	Index: 604-030-00-0		Aquatic Acute 1, H400		
			Aquatic Chronic 1,		
			H410		
			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.

Туре

[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	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use 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.

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.

3/17

SECTION 4: First aid measures

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.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low-molecular weight epoxy constituents which are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the mixture and exposure to spray, mist and vapors should be avoided.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately quantities have been ingested or inhaled.	if large
Specific treatments	No specific treatment.	

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 media	: Do not use water jet.	
5.2 Special hazards arising f	om 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	elease measures	

0.1 Personal precautions, pro	nective 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.
Date of issue/Date of revision : 1	5, Apr, 2024 Date of previous issue : 17, Sep, 2023 Version : 8 4/17

SECTION 6: Accidental release measures		
6.4 Reference to other	: See Section 1 for emergency contact information.	
sections	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 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 of the conducting type. Keep away from heat, sparks and flame. No sparking tools 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. 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 solutions	: 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.

SECTION 7: Handling and storage

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 $\overline{1}$ 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
Toluene	EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values
	TWA: 192 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. STEL: 384 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes.
4,4'-Isopropylidenediphenol	EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values TWA: 2 mg/m ³ 8 hours. Form: Inhalable fraction

Biological exposure indices

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
Toluene	DNEL	Short term Inhalation	226 mg/m ³	General population [Human via the environment]	Systemic
	DNEL	Short term Inhalation	226 mg/m³	General population [Human via the environment]	Local
	DNEL	Long term Dermal	226 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	226 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	56.5 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Long term Oral	8.13 mg/	General	Systemic
nte of issue/Date of revision : 15, Apr, 2	024	Date of previous is	sue :17, Sep,	2023 Versio	on :8 6/1

SECTION 8: Exposure controls/personal protection

			kg bw/day	population	
				[Human via the	
				environment]	
	DNEL	Long term	192 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term	192 mg/m³	Workers	Local
		Inhalation	Ū		
	DNEL	Short term	384 mg/m³	Workers	Systemic
		Inhalation	Ũ		5
	DNEL	Short term	384 mg/m³	Workers	Local
		Inhalation	J		
	DNEL	Long term Dermal	384 mg/kg	Workers	Systemic
			bw/day		- ,
	DNEL	Long term	56.5 mg/m ³	General	Local
		Inhalation	ee.e	population	
				[Consumers]	
2-Propanol	DNEL	Long term Dermal	888 mg/kg	Workers	Systemic
	DILLE	Long tonin Donnar	bw/day		e yotonno
	DNEL	Long term	500 mg/m ³	Workers	Systemic
		Inhalation	Soo mg/m	VV OINCIS	Oysternie
	DNEL		319 mg/kg	General	Systemic
	DNEL	Long term Derma			Systemic
			bw/day	population	
			00	[Consumers]	Curatamia
	DNEL	Long term	89 mg/m³	General	Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Oral	26 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Toluene	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	, C	
	Soil	2.89 mg/kg	Assessment Factors
	Fresh water sediment	16.39 mg/kg dwt	-
	Marine water sediment	16.39 mg/kg dwt	-
2-Propanol	Fresh water	140.9 mg/l	-
	Marine water	140.9 mg/l	-
	Sewage Treatment	2251 mg/l	-
	Plant	Ū,	
	Sediment	552 mg/kg dwt	-
	Soil	28 mg/kg	-
	Secondary Poisoning	160 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 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 measures

SHW-A4-EU-CLP44-UA

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. 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 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 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/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.
Body protection	 Personnel should wear antistatic clothing made of natural fibers or of high- temperature-resistant synthetic fibers.
	: 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 vapor 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.

Date of issue/Date of revision	: 15, Apr, 2024	Date of previous issue	:17, Sep, 2023	Version : 8	8/17
				SHW-A4-EU-CLP44-UA	

SECTION 8: Exposure controls/personal protection

Environmental exposure : Do not allow to enter drains or watercourses. *controls*

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

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Black.
Odor	: Paint
Odor threshold	: Not Available (Not Tested).
рH	: Not relevant/applicable due to nature of the product. insoluble in water.
Melting point/freezing point	: Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range	: 81°C
Flash point	: Closed cup: 4°C [Pensky-Martens Closed Cup]
Evaporation rate	: 2 (butyl acetate = 1)
Flammability	: Flammable liquid.
Lower and upper explosion limit	: LEL: 1% (Toluene) UEL: 12.7% (2-Propanol)
Vapor pressure	: 4.4 kPa (33 mm Hg)
Relative vapor density	: 2.07 [Air = 1]
Relative density	: 1.43
Solubility(ies)	:
Media	Result
cold water	Not soluble

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

2

Auto-ignition temperature

Ingredient name		°C	°F	Method
2-Propanol Toluene		398 480	748.4 896	
Decomposition temperature	: Not rele	evant/applicable	due to nature o	f the product.
/iscosity	: Kinema	tic (40°C): <20.	5 mm²/s	
Explosive properties	: Under normal conditions of storage and use, hazardous reactions will not occur			
Dxidizing properties	: Under r	normal condition	s of storage an	d use, hazardous reactions will not occu
Particle characteristics				
Median particle size	: Not rele	vant/applicable	due to nature o	f the product.
2 Other information				
leat of combustion	: 9.15 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: oxidizing 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 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.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low-molecular weight epoxy constituents which are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the mixture and exposure to spray, mist and vapors should be avoided.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
2-Propanol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
4,4'-Isopropylidenediphenol	LD50 Oral	Rat	1200 mg/kg	-

Acute toxicity estimates

No data available

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
				100 mg	
	Eyes - Mild irritant	Rabbit	-	870 ug	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				mg	
	Skin - Mild irritant	Pig	-	24 hours 250	-
				uL	
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
	Skin - Moderate irritant	Rabbit	-	500 mg	-
2-Propanol	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
4,4'-Isopropylidenediphenol	Eyes - Severe irritant	Rabbit	-	24 hours 250	-
				ug	
	Skin - Mild irritant	Rabbit	-	250 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	

Conclusion/Summary

: Not available.

: Not available.

Sensitization

No data available

Conclusion/Summary

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
Toluene	Category 3	-	Narcotic effects
2-Propanol	Category 3	-	Narcotic effects
4,4'-Isopropylidenediphenol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
Toluene	ASPIRATION HAZARD - Category 1

SECTION 11: Toxicological information

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.

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 >433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus	48 hours
		<i>pseudolimnaeus</i> - Adult	
	Acute EC50 6000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours
		Juvenile (Fledgling, Hatchling,	
		Weanling)	
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch -	96 hours
		Fry	
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
2-Propanol	Acute EC50 7550 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours
		Neonate	
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
4,4'-Isopropylidenediphenol	Acute EC50 1.506 mg/l Marine water	Algae - Prorocentrum minimum -	72 hours
		Exponential growth phase	
	Acute EC50 1800 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 7.3 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 1.34 mg/l Marine water	Crustaceans - Americamysis	48 hours
		<i>bahia</i> - Larvae	
	Acute LC50 3.5 mg/l Marine water	Fish - <i>Rivulus marmoratus</i> - Embryo	96 hours
	Chronic NOEC 2 mg/l Fresh water	Algae - Chlorolobion braunii -	4 days
		Exponential growth phase	
	Chronic NOEC 10 µg/l Marine water	Crustaceans - Tigriopus	21 days
		<i>japonicus</i> - Nauplii	
	Chronic NOEC 30 µg/l Fresh water	Daphnia - Daphnia magna -	21 days
		Neonate	
	Chronic NOEC 0.2 µg/l Fresh water	Fish - Carassius auratus - Adult	90 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
Toluene 2-Propanol	-		-		Readily Readily	

12.3 Bioaccumulative potential

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

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
Toluene 4,4'-Isopropylidenediphenol	-	90 20 to 67	Low Low

12.4 Mobility in soil

Soil/water partition coefficient (K _{oc})	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

<u>Product</u>		
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.
Packaging		
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*

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. 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	PAINT	PAINT
14.3 Transport Hazard Class(es)/ Label(s)	3	3	3
14.4 Packing group	II	11	11
14.5 Environmental hazards	No.	No.	No.
Additional information	Special provisions 640 (C) Tunnel code D/E	<u>Emergency schedules</u> F-E, S-E	-

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

14.7 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 <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

<u>Annex XIV</u>

None of the components are listed.

Substances of very high concern

SECTION 15: Regulatory information

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
4,4'-Isopropylidenediphenol	Toxic to reproduction	Recommended	ED/01/2018	10/1/2019
4,4'-Isopropylidenediphenol	Endocrine disrupting properties for human health	Recommended	ED/01/2018	10/1/2019
4,4'-Isopropylidenediphenol	Endocrine disrupting properties for environment	Recommended	ED/01/2018	10/1/2019

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

Product/ingredient name		% ≥90 ≥25 - ≤50 <0.1	Designation [Usage] 3 48 66		
FIRETEX C69 Epoxy Blast Primer - Base toluene 4,4'-isopropylidenediphenol					
Labeling	: No	ot ap			
Other EU regulations					
VOC content (2010/75/EU)		2.3 61			
Explosive precursors	: No	ot ap			
<u>Seveso Directive</u>					
This product may add to the major accident hazards.	calcul	atio	ite is within t	the scope of	the Seveso Directive on
National regulations					
5.2 Chemical Safety ssessment	: No	Ch	as been carr	ied out.	
ECTION 16: Other infor	mati	on			

Indicates information th	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]

SECTION 16: Other information						
Classi	fication	Justification				
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		On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method				
Full text of abbreviated H statements	H304May beH315CausesH317May cauH318CausesH319CausesH335May cauH336May cauH360FMay darH361dSuspectH373May cauexposurH400H410Very tox	lammable liquid and vapor. fatal if swallowed and enters airways. skin irritation. use an allergic skin reaction. serious eye damage. serious eye irritation. use respiratory irritation. use drowsiness or dizziness. mage fertility. ted of damaging the unborn child. use damage to organs through prolonged or repeated re. kic to aquatic life. kic to aquatic life with long lasting effects.				
Full text of classifications [CLP/GHS]	: Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Repr. 1B Repr. 2 Skin Irrit. 2 Skin Sens. 1 STOT RE 2	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 TOXIC TO REPRODUCTION - Category 1B TOXIC TO REPRODUCTION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 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	: 17, Sep, 2023					
	: If there is no previous vali information.	dation date please contact your supplier for more				
Version	: 8					

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.

SECTION 16: Other information

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 reguirements 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.