SAFETY DATA SHEET

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

	ation of the substance/mixture and of the company/undertaking	
1.1 Product identifier		
Product name	: Resuflor SL ESD Hardener	
Product code	: RESMA	
1.2 Relevant identified us	ses of the substance or mixture and uses advised against	
Material uses	: Paint or paint related material.	
	: Industrial use only.	
1.3 Details of the supplied sheet	^r of the safety data	
Sherwin-Williams UK Limi Coatings Division EMEAI Tower Works Kestor Street Bolton	ted - Protective & Marine	
BL2 2AL		
United Kingdom		
+44 (0) 1204 521771		
The Sherwin-Williams Con Inver France SAS 2 Rue Jean Revaus - BP Thouars CEDEX		
France		
e-mail address of person responsible for this SDS		
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 s	ubstance or mixture	
Product definition	: Mixture	
	to Regulation (EC) No. 1272/2008 [CLP/GHS]	
Acute Tox. 4, H302		
Skin Corr. 1B, H314		
Eye Dam. 1, H318		
Skin Sens. 1, H317		

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.

Repr. 1B, H360Fd Aquatic Chronic 1, H410

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SECTION 2: Hazards identification

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

2.2 Label elements

Hazard nictograms

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May damage fertility. Suspected of damaging the unborn child. Very toxic 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. Avoid release to the environment.
Response	: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Immediately call a POISON CENTER or doctor.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	: 3-aminomethyl-3,5,5-trimethylcyclohexylamine benzyl alcohol 4,4'-isopropylidenediphenol
Supplemental label elements	: FOR INDUSTRIAL USE ONLY
Special packaging requiren Not applicable.	nents

23	Othor	hazards
Z .J	Ourer	nazarus

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 affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100. 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 3: Composition/information on ingredients

3.2	Mixture
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Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Isophorone Diamine	EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥25 - ≤50	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	ATE [Oral] = 1030 mg/kg Skin Sens. 1, H317: C ≥ 0.001%	[1]
Phenylmethanol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≥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]
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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Resuflor SL ESD Hardener

RESMA

SECTION 3: Composition/information on ingredients

SECTION 3: Composition/information on ingredients					
Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with glycidyl tolyl ether	Index: 603-057-00-5 REACH #: 01-2120770776-40 EC: 291-130-9 CAS: 90341-97-2	≥10 - ≤16	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	I ATE [Oral] = 500 mg/kg M [Acute] = 1	[1]
1,3-Benzenedimethanamine	EC: 216-032-5 CAS: 1477-55-0	≤10	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 930 mg/kg ATE [Inhalation (gases)] = 4500 ppm	[1]
4,4'-Isopropylidenediphenol	REACH #: 01-2119457856-23 EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0	≤8.8	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 10	[1] [2] [3]
Salicylic Acid	EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5	≤5	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 500 mg/kg	[1]

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. Type

[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

 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.
 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.
 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
 If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
: 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.

Resuflor SL ESD Hardener

SECTION 4: First aid measures

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 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine), 4,4'-isopropylidenediphenol. 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)

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 fi	rom 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, pro	ote	ective 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.
		Keep unnecessary and unprotected personnel from entering.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	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 on	2	

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. 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
	during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

SECTION 7: Handling and storage

•	-
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.
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	
4,4'-Isopropylidenediphenol	EH40/2005 WELs (United Kingdom (UK), 1/2020).	
	TWA: 2 mg/m ³ 8 hours.	

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

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

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

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.

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SECTION 8: Exposure controls/personal protection

: 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. : Use safety evewear designed to protect against splash of liquids. Eye/face protection Skin protection Hand protection : Wear suitable gloves tested to EN374. Gloves : 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. : Personnel should wear antistatic clothing made of natural fibres or of high-Body protection temperature-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. : Appropriate footwear and any additional skin protection measures should be Other skin protection 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.

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

Media	Result	
Solubility(ies)	:	
Relative density	: 1.04	
Relative vapour density	: 3.72 [Air = 1]	
Vapour pressure	: 0.02 kPa (0.15 mm Hg)	
Flammability Lower and upper explosion limit	 Not relevant/applicable due to nature of the product. LEL: 1.1% (Salicylic Acid) UEL: 13% (Phenylmethanol) 	
Evaporation rate	: Not relevant/applicable due to nature of the product.	
boiling range Flash point	: Closed cup: 100°C [Pensky-Martens Closed Cup]	
Initial boiling point and	: 202°C	
Melting point/freezing point	insoluble in water. Not relevant/applicable due to nature of the product.	
pH	 Not relevant/applicable due to nature of the product. 	
Odour Odour threshold	Solvent.Not Available (Not Tested).	
Colour	Colourless.	
Physical state	: Liquid.	
<u>Appearance</u>		

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

1

Not soluble

Auto-ignition temperature

cold water

Ingredient name		°C	°F	Method
Phenylmethanol 4,4'-Isopropylidenediphenol Salicylic Acid		436 500 540	816.8 932 1004	
Decomposition temperature	: Not re	elevant/applic	able due to nature c	f the product.
/iscosity	: Kiner	natic (40°C): ३	>20.5 mm²/s	
Explosive properties	: Under normal conditions of storage and use, hazardous reactions will not o			d use, hazardous reactions will not occur.
Dxidising properties	: Unde	r normal conc	litions of storage an	d use, hazardous reactions will not occur.
Particle characteristics				
Median particle size	: Not re	elevant/applica	able due to nature o	f the product.
2 Other information				
leat of combustion	: 36.11	1 kJ/q		

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredie	ents.
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	r.
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 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine), 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phenylmethanol	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
1,3-Benzenedimethanamine	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-
4,4'-Isopropylidenediphenol	LD50 Oral	Rat	1200 mg/kg	-

Acute toxicity estimates

SECTION 11: Toxicological information

Route	ATE value
Oral	970.3 mg/kg
Inhalation (gases)	50000 ppm
Inhalation (vapours)	37.93 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	
1,3-Benzenedimethanamine	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
	-			ug	
	Skin - Severe irritant	Rabbit	-	24 hours 750	-
				ug	
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.

Sensitisation

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
4,4'-Isopropylidenediphenol	Category 3	-	Respiratory tract 🥄 irritation

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

No data available

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

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

SECTION 11: Toxicological information

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
Isophorone Diamine	Acute EC50 17.4 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours 🥄
Phenylmethanol	Acute LC50 10 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
4,4'-Isopropylidenediphenol	Acute EC50 1.506 mg/l Marine water	Algae - <i>Prorocentrum minimum</i> - Exponential growth phase	72 hours
	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 - <i>Americamysis</i> <i>bahia</i> - Larvae	48 hours
	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 - Exponential growth phase	4 days
	Chronic NOEC 10 µg/l Marine water	Crustaceans - <i>Tigriopus</i> <i>japonicus</i> - Nauplii	21 days
	Chronic NOEC 30 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
	Chronic NOEC 0.2 µg/l Fresh water	Fish - Carassius auratus - Adult	90 days
Salicylic Acid	Acute LC50 111.7 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - <i>Daphnia magna -</i> Neonate	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
Phenylmethanol	-		-		Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,3-Benzenedimethanamine	-	2.69	Low
4,4'-Isopropylidenediphenol	-	20 to 67	Low

12.4 Mobility in soil

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

Resuflor SL ESD Hardener

RESMA

SECTION 12: Ecological information

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.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

	43	
<u>Product</u>		
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.
<u>Packaging</u>		
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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

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SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ	
14.1 UN number or ID number	UN3066	UN3066	UN3066	
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL Marine pollutant (4,4'- Isopropylidenediphenol)	PAINT RELATED MATERIAL	
14.3 Transport Hazard Class(es)/ Label(s)	8	8	8	
14.4 Packing group	II	П	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>Tunnel code</u> E	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-A, S-B	The environmentally hazardous substance mark may appear if required by other transportation regulations.	

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 authorisation

Annex XIV

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		%	Designation [Usage]
Resuflor SL ESD Hardener		≥90	3
4,4'-isopropylidenediphenol		≤8.8	30 30 66
Labelling	: Restricted to professional users.		
Other EU regulations			
VOC content (2010/75/EU)	: 40 w/w 418 g/l		
Explosive precursors <u>Seveso Directive</u>	: Not applicable.		
This product may add to the major accident hazards. National regulations	calculation for determining whether a site is within	n the scope of	f the Seveso Directive on
.2 Chemical safety sessment			

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]

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SECTION 16: Other info	ormation	
	fication	Justification
Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360Fd Aquatic Chronic 1, H410	incation	Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method
Full text of abbreviated H statements	H314 Ca H317 Ma H318 Ca H319 Ca H332 Ha H335 Ma H360F Ma H360Fd Ma H361d Su H400 Ve H410 Ve	armful if swallowed. auses severe skin burns and eye damage. ay cause an allergic skin reaction. auses serious eye damage. auses serious eye irritation. armful if inhaled. ay cause respiratory irritation. ay damage fertility. ay damage fertility. Suspected of damaging the unborn child. Ispected of damaging the unborn child. ery toxic to aquatic life. ery toxic to aquatic life with long lasting effects. bixic to aquatic life with long lasting effects. armful to aquatic life with long lasting effects.
Full text of classifications [CLP/GHS]	: Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Eye Dam. 1 Eye Irrit. 2 Repr. 1B Repr. 2 Skin Corr. 1B Skin Corr. 1C Skin Sens. 1 Skin Sens. 1A STOT SE 3	ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 REPRODUCTIVE TOXICITY - Category 1B REPRODUCTIVE TOXICITY - Category 2 SKIN CORROSION/IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 1 SKIN SENSITISATION - CATEGORY 1 SKIN SENSITISATI
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Date of issue/ Date of revision	: 21, Sep, 2023	
Date of previous issue	: 08, Aug, 2023	
	: If there is no previou information.	is validation date please contact your supplier for more
Version	: 12	

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.

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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 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.