# SAFETY DATA SHEET

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

1.1 Product identifier	
Product name	: Pipeclad 5000 Epoxy Hardener (Part B) - Green
Product code	: B62GV560
1.2 Relevant identified u	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 supplie sheet	r of the safety data
Mfg. in U.S.A and exporte The Sherwin-Williams Co 101 Prospect Avenue N.V Cleveland, OH 44115	mpany
EU Only Representative: Zuiveringweg 89 8243 PE Lelystad P.O. Box 2139 The Netherlands Phone: +31 (0)320 29 22	
e-mail address of perso responsible for this SDS	<b>n</b> : sds@sherwin.com
1.4 Emergency telephone	e number
National advisory body/	Poison Center
Telephone number	: 111 (general public) /0344 892 111 (Medical professional (NHS) only)
<u>Supplier</u>	
Telephone number	: +1 703-741-5970
Hours of operation	: Emergency contact available 24 hours a day
SECTION 2: Hazards	identification
2.1 Classification of the s	substance or mixture
Product definition	: Mixture
Acute Tox. 4, H332	g to Regulation (EC) No. 1272/2008 [CLP/GHS]
Skin Corr. 1B, H314 Eye Dam. 1, H318	

Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

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

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

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# **SECTION 2: Hazards identification**

# 2.2 Label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Causes severe skin burns and eye damage.</li> <li>May cause an allergic skin reaction.</li> <li>Harmful if inhaled.</li> <li>May cause respiratory irritation.</li> <li>Suspected of damaging fertility or the unborn child.</li> <li>Very toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Avoid release to the environment.
Response	: Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	<ul> <li>1,3-Benzenedimethanamine</li> <li>Paratertiarybutylphenol</li> <li>1,6-hexanediamine,2,2,4-trimethyl</li> <li>Alkyl Polyglycoside</li> </ul>
Supplemental label elements	: 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.
Other hazards which do not result in classification	<ul> <li>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</li> </ul>

# **SECTION 3: Composition/information on ingredients**

:

2017/2100.

#### 3.2 Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
1,3-Benzenedimethanamine	EC: 216-032-5 CAS: 1477-55-0	≥10 - ≤25	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]
Paratertiarybutylphenol	REACH #: 01-2119489419-21 EC: 202-679-0 CAS: 98-54-4 Index: 604-090-00-8	≥10 - ≤25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361f STOT SE 3, H335 Aquatic Chronic 1,	M [Chronic] = 1	[1] [2]
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				SHW-A4-EU-CLP44-	cs

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II Pipeclad 5000 Epoxy Hardener (Part B) - Green B62GV560						
SECTION 3: Compositi	on/information or	ingredier	nts			
Phenol, 4-Nonyl-, Branched	REACH #: 01-2119510715-45 EC: 284-325-5 CAS: 84852-15-3	≤14	H410 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361 (oral) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/kg M [Acute] = 10 M [Chronic] = 10	[1] [2]	
1,6-hexanediamine, 2,2,4-trimethyl	EC: 221-792-6 CAS: 3236-53-1	≤5	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg	[1]	
Phenol, 2-nonyl-, branched	EC: 294-048-1 CAS: 91672-41-2	<1	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]	
Med. Aliphatic Hydrocarbon Solvent	EC: 265-191-7 CAS: 64742-88-7 Index: 649-405-00-X	<1	Flam. Liq. 3, H226 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1]	
Alkyl Polyglycoside	EC: 271-845-2 CAS: 68609-96-1	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	-	[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.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] 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	<ul> <li>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.</li> </ul>
Eye contact	<ul> <li>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.</li> </ul>
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.

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# **SECTION 4: First aid measures**

Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>
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 m-phenylenebis(methylamine). May produce an allergic reaction.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	<ul> <li>In case of inhalation of decomposition products in a fire, symptoms may be delayed.</li> <li>The exposed person may need to be kept under medical surveillance for 48 hours.</li> </ul>
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 <sub>2</sub> , powders, water spray or mist.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising f	rom the substance or mixture
Hazards from the substance or mixture	<ul> <li>Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.</li> </ul>
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.
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# **SECTION 6: Accidental release measures**

6.1 Personal precautions, pro	ote	ctive 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.
<i>6.4 Reference to other sections</i>	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

# SECTION 7: Handling and storage

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

7.1 Precautions for safe handling	<ul> <li>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.</li> <li>Operators should wear antistatic footwear and clothing and floors should be of the conducting type.</li> <li>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.</li> <li>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.</li> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Never use pressure to empty. Container is not a pressure vessel.</li> <li>Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.</li> <li>Do not allow to enter drains or watercourses.</li> <li>Information on fire and explosion protection</li> <li>Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.</li> </ul>
	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.

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## **SECTION 7: Handling and storage**

7.2 Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. <b>Notes on joint storage</b> Keep away from: oxidizing agents, strong alkalis, strong acids. <b>Additional information on storage conditions</b> 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.
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**

No exposure limit value known.

#### **Biological exposure indices**

No exposure indices known.

#### **Recommended monitoring** : Reference should be made to monitoring standards, such as the following: procedures 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
Med. Aliphatic Hydrocarbon Solvent	DNEL	Long term Inhalation	871 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	185 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	125 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population [Consumers]	Systemic

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# **SECTION 8: Exposure controls/personal protection**

#### **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 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	sures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection Skin protection	: Use safety eyewear designed to protect against splash of liquids.
-	. Moor quitable gloves tested to EN274
Hand protection Gloves	<ul> <li>Wear suitable gloves tested to EN374.</li> <li>Gloves for short term exposure/splash protection (less than 10 min.): Nitrile&gt;0.12</li> </ul>
010763	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
	<ul> <li>gloves as under gloves</li> <li>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.</li> <li>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)</li> </ul>
	<ul> <li>There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.</li> <li>The breakthrough time must be greater than the end use time of the product.</li> <li>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.</li> <li>Gloves should be replaced regularly and if there is any sign of damage to the glove material.</li> <li>Always ensure that gloves are free from defects and that they are stored and used correctly.</li> <li>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.</li> </ul>
	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.

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#### SECTION 8: Exposure controls/personal protection

	<ul> <li>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.</li> </ul>
Other skin protection	<ul> <li>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.</li> </ul>
Respiratory protection	<ul> <li>Application methods: Brush or roller. Approved/certified respirator with organic vapor cartridge. Filter type: A2 P2 (EN14387).</li> <li>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.</li> </ul>
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

<u>Appearance</u>		
Physical state	:	Liquid.
Color	:	Green.
Odor	:	Solvent.
Odor threshold	:	Not Available (Not Tested).
pН	:	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	:	Not relevant/applicable due to nature of the product.
Flash point	:	Closed cup: 94°C [Pensky-Martens Closed Cup]
Evaporation rate	:	Not relevant/applicable due to nature of the product.
Flammability	:	Not relevant/applicable due to nature of the product.
Lower and upper explosion limit	:	Not relevant/applicable due to nature of the product.
Vapor pressure	:	Not relevant/applicable due to nature of the product.
Relative vapor density	:	Not relevant/applicable due to nature of the product.
Relative density	:	1.1
Solubility(ies)	:	
Media		Result
cold water		Not soluble
Partition coefficient: n-octanol/ water	:	Not relevant/applicable due to nature of the product.
Auto-ignition temperature	:	Not relevant/applicable due to nature of the product.
Decomposition temperature	:	Not relevant/applicable due to nature of the product.
Viscosity	:	Kinematic (40°C): >20.5 mm²/s
Explosive properties	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Oxidizing properties	:	Under normal conditions of storage and use, hazardous reactions will not occur.
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Conforms to Regulation (EC Pipeclad 5000 Epoxy Hardener (Par B62GV560	C) No. 1907/2006 (REACH), Annex II 't B) - Green
<b>SECTION 9: Physical ar</b>	nd chemical properties
Particle characteristics Median particle size	: Not relevant/applicable due to nature of the product.
9.2 Other information	
Heat of combustion	: 14.226 kJ/g
SECTION 10: Stability a	nd 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.

Contains m-phenylenebis(methylamine). May produce an allergic reaction.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,3-Benzenedimethanamine	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-
Phenol, 4-Nonyl-, Branched	LD50 Oral	Rat	1300 mg/kg	-

#### Acute toxicity estimates

: Not available.

: Not available.

# **SECTION 11: Toxicological information**

Route	ATE value
Oral	2206.01 mg/kg
Inhalation (gases)	18485.83 ppm

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,3-Benzenedimethanamine	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
	Ohin Ohina imitant	Dabbit		ug	
	Skin - Severe irritant	Rabbit	-	24 hours 750 ug	-
Paratertiarybutylphenol	Eyes - Severe irritant	Rabbit	-	10 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
	Skin - Mild irritant	Rabbit	-	ug 24 hours 500	-
	Skin - Mild irritant	Rabbit	-	mg 4 hours 500	-
Phenol, 4-Nonyl-, Branched	Eyes - Severe irritant Skin - Severe irritant	Rabbit Rabbit	-	mg 100 mg 24 hours 500	-
				mg	

## Conclusion/Summary

#### **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
Paratertiarybutylphenol	Category 3	-	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Med. Aliphatic Hydrocarbon Solvent	Category 1	-	central nervous system (CNS)

#### Aspiration hazard

Product/ingredient name	Result		
Med. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1		

## 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

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# **SECTION 11: Toxicological information**

#### 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
Paratertiarybutylphenol	Acute EC50 11.08 mg/l Fresh water	Algae - <i>Scenedesmus</i> <i>quadricauda</i> - Exponential growth phase	72 hours
	Acute EC50 3.9 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 5140 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1 mg/l Fresh water	Algae - <i>Scenedesmus</i> <i>quadricauda</i> - Exponential growth phase	72 hours
	Chronic NOEC 0.45 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.5 mg/l Fresh water	Fish - <i>Gobiocypris rarus -</i> Embryo	28 days
Phenol, 4-Nonyl-, Branched	Acute EC50 0.03 mg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 0.027 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 17 μg/l Marine water	Fish - <i>Pleuronectes americanus</i> - Larvae	96 hours
	Chronic EC10 0.012 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Chronic NOEC 5 µg/l Fresh water	Crustaceans - Gammarus fossarum - Adult	21 days
	Chronic NOEC 7.4 µg/l Fresh water	Fish - <i>Pimephales promelas -</i> Embryo	33 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
No data available						

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,3-Benzenedimethanamine	-	2.69	Low
Paratertiarybutylphenol	-	44 to 48	Low
Phenol, 4-Nonyl-, Branched	-	740	High

#### 12.4 Mobility in soil

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

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## **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				
Product				
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*		
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 spilled 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 (Phenol, 4-Nonyl-, Branched, Paratertiarybutylphenol)	PAINT RELATED MATERIAL		
14.3 Transport Hazard Class(es)/ Label(s)	8	8	8		
14.4 Packing group	II 🔍	11	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

# EU Regulation (EC) No. 1907/2006 (REACH)

## Annex XIV - List of substances subject to authorization

#### Annex XIV

None of the components are listed.

#### Substances of very high concern

Ingredient name	Intrinsic property		Reference number	Date of revision
Paratertiarybutylphenol	Endocrine disrupting properties for environment		ED/71/2019, EU/2019/1194	7/16/2019
Phenol, 4-Nonyl-, Branched	-	Candidate	ED/169/2012	12/19/2012

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## **SECTION 15: Regulatory information**

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

Product/ingredient nam	9	%	Designation [Usage]
Pipeclad 5000 Epoxy Hardener (Part B) Phenol, 4-nonyl-, branched		≥90 ≤14	3 46
Phenol, 2-nonyl-, branche	d	<1	46
Labeling	: Not applicable.	·	
Other EU regulations			
VOC content (2010/75/E	り: 0.32 w/w 3 g/l		
Explosive precursors			
: Not applicable.			
<u>Seveso Directive</u>			
This product may add to t major accident hazards. <b>National regulations</b>	e calculation for determining whether a site is	s within the scope	of the Seveso Directive or
5.2 Chemical Safety ssessment ECTION 16: Other int	: No Chemical Safety Assessment has be	een carried out.	
bbreviations and	has changed from previously issued version.		
	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Pac	kaging Regulatior	n [Regulation (EC) No.

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

Commission Regulation (EU) 2020/878

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

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

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

Dangerous Goods by Road

**CEPE** Guidelines

Classification	Justification	Justification	
Acute Tox. 4, H332	Calculation method		
Skin Corr. 1B, H314	Calculation method		
Eye Dam. 1, H318	Calculation method		
Skin Sens. 1, H317	Calculation method		
Repr. 2, H361	Calculation method		
STOT SE 3, H335	Calculation method		
Aquatic Acute 1, H400	Calculation method		
Aquatic Chronic 1, H410	Calculation method		

Date of issue/Date of revision : 01, Apr, 2024

Key literature references

and sources for data

ADR = The European Agreement concerning the International Carriage of

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

14/16

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## **SECTION 16: Other information**

Full text of abbreviated H statements	<ul> <li>H226 Flammable liquid and vapor.</li> <li>H302 Harmful if swallowed.</li> <li>H304 May be fatal if swallowed and enters airways.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H315 Causes skin itritation.</li> <li>H316 Causes serious eye damage.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H318 Causes serious eye damage.</li> <li>H319 Causes serious eye irritation.</li> <li>H335 May cause respiratory irritation.</li> <li>H335 May cause respiratory irritation.</li> <li>H335 May cause respiratory irritation.</li> <li>H336 May cause respiratory irritation.</li> <li>H337 Causes serious eye damaging fertility or the unborn child.</li> <li>H361f Suspected of damaging fertility.</li> <li>H372 Causes damage to organs through prolonged or repeated exposure.</li> <li>H400 Very toxic to aquatic life with long lasting effects.</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> <li>EUH066 Repeated exposure may cause skin dryness or cracking.</li> <li>Acute Tox. 4 ACUTE TOXICITY - Category 4</li> <li>Aquatic Chronic 1 AQUATIC HAZARD (LONG-TERM) - Category 1</li> <li>Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 1</li> <li>Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 1</li> <li>Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 2</li> <li>Aquatic Chronic 3 AQUATIC HAZARD - Category 1</li> <li>Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2</li> <li>Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3</li> <li>Repr. 2 TOXIC TO REPRODUCTION - Category 1</li> <li>Eye IRIT. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2</li> <li>Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1</li> <li>Stort RE 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1</li> <li>STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3</li> </ul>
Date of printing	: 01, Apr, 2024.
Date of issue/ Date of revision	: 01, Apr, 2024
Date of previous issue	: 04, Mar, 2024
	<ul> <li>If there is no previous validation date please contact your supplier for more information.</li> </ul>
Version	: 11

#### 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

# **SECTION 16: Other information**

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become 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.