SAFETY DATA SHEET

Date of issue/Date of revision : 10 October 2022 Version : 1



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

1.1 Product identifier

Product name : AMERLOCK 2/400 HARDENER

Product code : 00281126

Product description

Product type : Liquid.

Other means of : Not available.

identification

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against: Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

PPG Architectural Coatings UK Ltd, Huddersfield Road, Birstall, West Yorkshire WF17 9XA, Tel: +44 (0) 1924 354000

1.4 Emergency telephone number

Supplier

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

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

2.2 Label elements

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SECTION 2: Hazards identification

Hazard pictograms











Signal word : Danger

Hazard statements : Flammable liquid and vapour.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Suspected of causing cancer.

Suspected of damaging fertility. Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

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

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

smoking. Avoid release to the environment.

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

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

P280, P210, P273, P391, P304 + P310, P501

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No.

: 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

1907/2006, Annex XIII

: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Mixture

3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification	Type
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥10 - ≤25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4	≥5.0 - <10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs)	[1] [2]

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SECTION 3: Composition/information on ingredients

SECTION 3: Composition	<u>~</u>	ealents		
	Index: 601-023-00-4		Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
nonylphenol	EC: 246-672-0 CAS: 25154-52-3 Index: 601-053-00-8	≥5.0 - ≤10	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361fd Aquatic Acute 1, H400	[1] [3]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥5.0 - ≤10	(M=10) Aquatic Chronic 1, H410 (M=10) Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1] [2]
Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	REACH #: 01-2119557899-12 EC: 618-561-0 CAS: 9046-10-0 (n = 2-6)	≥5.0 - ≤10	Asp. Tox. 1, H304 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	[1]
furfuryl alcohol	REACH #: 01-2119493965-18 EC: 202-626-1 CAS: 98-00-0 Index: 603-018-00-2	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 3, H331 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373	[1]
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	REACH #: 01-0000017900-73 EC: 432-840-2 CAS: 220926-97-6 Index: 616-201-00-7	≥1.0 - ≤5.0	Acute Tox. 4, H332 STOT RE 2, H373 (lungs) (inhalation) Aquatic Chronic 4, H413	[1]
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	<1.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
p-nonylphenol	EC: 203-199-4 CAS: 104-40-5	≤0.10	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1] [3]
			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.

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.

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SECTION 3: Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for

at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep

person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

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.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

: Do not use water jet.

media

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides sulfur oxides

halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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SECTION 6: Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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).

Occupational exposure limits

Product/ingredient name	Exposure limit values				
ethylbenzene xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m³ 8 hours. TWA: 100 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p-or mixed isomers] Absorbed through skin. STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.				

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty	DNEL	Long term Oral	0.56 mg/kg bw/day	General population	Systemic
acids and triethylenetetramine					
	DNEL	Long term Dermal	0.56 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.97 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.9 mg/m ³	Workers	Systemic
ethylbenzene	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
kylene	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
Poly[oxy(methyl-	DNEL	Long term Inhalation	1.36 mg/m³	Workers	Systemic
1,2-ethanediyl)], α-					
2-aminomethylethyl)-ω-					
2-aminomethylethoxy)-					
	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic
furfuryl alcohol	DNEL	Short term Oral	2.4 mg/kg bw/day	General population	Systemic

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SECTION 8: Exposure controls/personal protection

	•			
DNEL	Long term Oral	2.4 mg/kg bw/day	General population	Systemic
DNEL	Long term Dermal	2.4 mg/kg bw/day	General population	Systemic
DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
DNEL	Short term Inhalation	8 mg/m³	General population	Local
DNEL	Long term Inhalation	8 mg/m³	General population	Local
DNEL	Short term Inhalation	8 mg/m³	Workers	Local
DNEL	Long term Inhalation	8 mg/m³	Workers	Local
DNEL	Long term Inhalation	9.3 mg/m³	General population	Systemic
DNEL	Long term Inhalation	31 mg/m³	Workers	Systemic
DNEL	Short term Inhalation	128.5 mg/m³	General population	Systemic
DNEL	Short term Inhalation	143 mg/m³	Workers	Systemic
DNEL	Long term Inhalation	82.5 µg/m³	General population	Local
DNEL	Long term Inhalation	332 μg/m³	Workers	Local
DNEL		Ŭ.		Local
DNEL	Short term Inhalation	51.3 mg/m³	Workers	Local
•	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DNEL Long term Dermal Long term Dermal Short term Inhalation DNEL DNEL Long term Inhalation Long term Inhalation Long term Inhalation Long term Inhalation DNEL DNEL DNEL DNEL Short term Inhalation Short term Inhalation Long term Inhalation DNEL DNEL Cong term Inhalation Long term Inhalation DNEL Short term Inhalation DNEL Cong term Inhalation Short term Inhalation Short term Inhalation Short term Inhalation Short term Inhalation	DNEL Long term Dermal Long term Dermal Short term Inhalation DNEL Long term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Cong term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation Short term Inhal	DNEL Long term Dermal Long term Dermal DNEL Short term Inhalation DNEL Long term Inhalation DNEL Short term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL Short term Inhalation Short term Inh

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Fresh water	0.043 mg/l	Assessment Factors
•	Marine water	0 mg/l	Assessment Factors
	Sewage Treatment Plant	3.84 mg/l	Assessment Factors
	Fresh water sediment	434.02 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	43.4 mg/kg dwt	Equilibrium Partitioning
	Soil	86.78 mg/kg dwt	Equilibrium Partitioning
ethylbenzene	Fresh water	0.1 mg/l	Assessment Factors
•	Marine water	0.01 mg/l	Assessment Factors
	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	Secondary Poisoning	20 mg/kg	-
xylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	_
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	Fresh water	0.015 mg/l	Assessment Factors
, ,,,	Marine water	0.014 mg/l	Assessment Factors
	Sewage Treatment Plant		Assessment Factors
	Fresh water sediment	0.132 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment Soil	0.125 mg/kg dwt 0.018 mg/kg dwt	Equilibrium Partitioning Equilibrium Partitioning

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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

Eye/face protection
Skin protection
Hand protection

: Chemical splash goggles and face shield.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. 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.

butyl rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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

Appearance

Physical state : Liquid.

Colour: Not available.Odour: Aromatic.Odour threshold: Not available.

Melting point/freezing point

: May start to solidify at the following temperature: -8°C (17.6°F) This is based on data for the following ingredient: nonylphenol. Weighted average: -56.69°C (-70°F)

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas) : liquid

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SECTION 9: Physical and chemical properties

Upper/lower flammability or : Greatest known range: Lower: 1.8% Upper: 16.3% (furfuryl alcohol)

explosive limits

Flash point : Closed cup: 28°C (82.4°F)

Auto-ignition temperature

Ingredient name	°C	°F	Method
nonylphenol	370	698	

Decomposition temperature

: Not applicable. pН

Not applicable. insoluble in water.

Viscosity : Kinematic (40°C): >21 mm²/s

Solubility(ies) Method

Media	Result	
cold water	Not soluble	

Miscible with water : No.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure

	Vapour Pressure at 20°C		Vap	oour pressure at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa
ethylbenzene	9.3	1.2			

Relative density : 1.41

Vapour density : Highest known value: 15.4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-

C9-11-branched alkyl esters, C10-rich). Weighted average: 6.39 (Air = 1)

Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of

Product does not present an oxidizing hazard.

vapour or dust with air is possible.

Oxidising properties

: Not applicable.

Particle characteristics Median particle size

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 The product is stable.

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.

Refer to protective measures listed in sections 7 and 8.

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 : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds

metal oxide/oxides

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SECTION 11: Toxicological information

11.1 Information on toxicological effects <u>Acute toxicity</u>

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
dimers, oligomeric reaction				
products with tall-oil fatty				
acids and				
triethylenetetramine				
•	LD50 Oral	Rat	>2000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
,	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
, ,	LD50 Oral	Rat	580 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Poly[oxy(methyl-	LD50 Dermal	Rat	2980 mg/kg	_
1,2-ethanediyl)], α-			3.3	
(2-aminomethylethyl)-ω-				
(2-aminomethylethoxy)-				
(,,	LD50 Oral	Rat	2885 mg/kg	_
furfuryl alcohol	LC50 Inhalation Vapour	Rat	934 mg/m ³	4 hours
,	LC50 Inhalation Vapour	Rat	233 ppm	4 hours
	LD50 Dermal	Rabbit	400 mg/kg	-
	LD50 Dermal	Rat	3825 mg/kg	_
	LD50 Oral	Rat	0.132 g/kg	_
12-hydroxyoctadecanoic	LC50 Inhalation Dusts and	Rat	3.56 mg/l	4 hours
acid, reaction products with	mists		0.00g/.	
1,3-benzenedimethanamine				
and hexamethylenediamine				
	LD50 Dermal	Rat	>2000 mg/kg	_
	LD50 Oral	Rat	>2000 mg/kg	_
3,6-diazaoctanethylenediamin		Rabbit	1465 mg/kg	_
o,o a.a.a.a.o.a.i.o.i.yioii.oalaiiiii	LD50 Oral	Rat	1716 mg/kg	_
p-nonylphenol	LD50 Oral	Rat	1620 mg/kg	_

Conclusion/Summary Acute toxicity estimates

: There are no data available on the mixture itself.

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
AMERLOCK 2/400 HARDENER	4161.1	13917.7	N/A	40.9	273.4
ethylbenzene	3500	17800	N/A	17.8	N/A
nonylphenol	580	2140	N/A	N/A	N/A
xylene	4300	1700	N/A	11	N/A
Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	2885	2980	N/A	N/A	N/A
furfuryl alcohol	500	1100	N/A	3	N/A
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	N/A	N/A	N/A	N/A	3.56
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A
p-nonylphenol	1620	N/A	N/A	N/A	N/A

Irritation/Corrosion

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SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
xylene	Skin - Irritant Skin - Moderate irritant	Human Rabbit	-	- 24 hours 500 mg	-

Conclusion/Summary: Not available.

Skin
 There are no data available on the mixture itself.
 Eyes
 There are no data available on the mixture itself.
 Respiratory
 There are no data available on the mixture itself.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitising
3,6-diazaoctanethylenediamin		Guinea pig	Sensitising

Conclusion/Summary

Skin : There are no data available on the mixture itself. **Respiratory** : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary: There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary :

There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
furfuryl alcohol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
furfuryl alcohol	Category 2	-	hearing organs
	Category 2	-	-
	Category 2	inhalation	lungs

Aspiration hazard

Product/ingredient name	Result
ethylbenzene xylene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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SECTION 11: Toxicological information

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: Suspected of damaging fertility. Suspected of damaging the unborn child.

Other information : Not available.

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Code Date of issue/Date of revision : 10 October 2022 : 00281126

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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - Green algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 0.003 mg/l Fresh water	Algae - Green algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	21 days
Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	EC50 15 mg/l	Algae	72 hours
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata (microalgae)	72 hours
,	Acute EC50 >100 mg/l	Daphnia - Daphnia magna (Water flea)	48 hours
	Acute LC50 >100 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
	Chronic NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC ≥50 mg/l	Daphnia - Daphnia magna (Water flea)	21 days

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	- OECD 301D Ready Biodegradability - Closed Bottle Test	79 % - Readily - 10 days 9 % - Not readily - 29 days	-	-

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
ethylbenzene	-	-	Readily
xylene	-	-	Readily
Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	-	-	Not readily

12.3 Bioaccumulative potential

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AMERLOCK 2/400 HARDENER

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	79.43	low
nonylphenol	3.28	154.88	low
xylene	3.12	7.4 to 18.5	low
furfuryl alcohol	0.3	-	low
12-hydroxyoctadecanoic	>6	-	high
acid, reaction products with			
1,3-benzenedimethanamine			
and hexamethylenediamine			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	low
p-nonylphenol	5.76	380.19	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: 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 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: Yes.

Waste catalogue

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	Waste catalogue	
Container	15 01 06	mixed packaging

Special precautions

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

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SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Polyamide, nonylphenol)	Not applicable.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

≤5 kg.

Tunnel code : (D/E)

ADN : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

user

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

the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for environment	4-nonylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof 4-nonylphenol, branched and linear	Candidate Candidate	-	12/19/2012
	substances with a linear and/or branched	Candidate		12/10/2012

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SECTION 15: Regulatory information

alkyl chain with a carbon number of 9
covalently bound in position 4 to phenol,
covering also UVCB- and well-defined
substances which include any of the
individual isomers or a combination thereof

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

P5c E1

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

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

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification	
Flam. Liq. 3, H226	On basis of test data	
Skin Corr. 1B, H314	Calculation method	
Eye Dam. 1, H318	Calculation method	
Skin Sens. 1, H317	Calculation method	
Carc. 2, H351	Calculation method	
Repr. 2, H361fd	Calculation method	
Aguatic Acute 1, H400	Calculation method	
Aquatic Chronic 1, H410	Calculation method	

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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SECTION 16: Other information

H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications

- Will toke or state in the state of the sta		
Acute Tox. 3	ACUTE TOXICITY - Category 3	
Acute Tox. 4	ACUTE TOXICITY - Category 4	
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1	
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1	
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4	
Asp. Tox. 1	ASPIRATION HAZARD - Category 1	
Carc. 2	CARCINOGENICITY - Category 2	
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2	
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3	
Repr. 2	REPRODUCTIVE TOXICITY - Category 2	
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B	
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C	
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2	
Skin Sens. 1	SKIN SENSITISATION - Category 1	
Skin Sens. 1A	SKIN SENSITISATION - Category 1A	
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2	
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3	

History

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revision

Date of previous issue : No previous validation

Prepared by : EHS Version : 1

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