

# SAFETY DATA SHEET

## AMERLOCK 2 CURE



Date of issue 14 March 2024

Version 2

### 1. Product and company identification

Product name : AMERLOCK 2 CURE

Product code : 00445509

Product type : Liquid.

#### 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 : Not applicable.

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe  
652-0803 Japan; Tel: +81-78-574-2777

Emergency telephone  
number : 078 574 2777

### 2. Hazards identification


GHS Classification :  FLAMMABLE LIQUIDS - Category 4  
SKIN CORROSION - Category 1  
SERIOUS EYE DAMAGE - Category 1  
RESPIRATORY SENSITIZATION - Category 1  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 1A  
TOXIC TO REPRODUCTION - Category 1A  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 1  
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -  
Category 1

#### GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements :  Combustible liquid.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause cancer.  
May damage fertility or the unborn child.  
Causes damage to organs. (central nervous system (CNS), kidneys, liver,  
respiratory organs)

2. Hazards identification

Causes damage to organs through prolonged or repeated exposure. (bladder, central nervous system (CNS), kidneys, nervous system, respiratory organs)  
Very toxic to aquatic life with long lasting effects.

Precautionary statements

- Prevention
  - Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response
  - Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- Storage
  - Store locked up.
- Disposal
  - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Causes digestive tract burns.

3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

- CAS number : Not applicable.
- CSCL number : Not available.

Ingredient name	%	CAS number	CSCL
Talc containing no asbestos or quartz	25 - <50	14807-96-6	Not available.
barium sulfate	12.5 - <15	7727-43-7	1-89
nonylphenol	12.5 - <15	25154-52-3	3-503
benzyl alcohol	7 - <10	100-51-6	3-1011
diisodecyl phthalate	3 - <5	68515-49-1	3-1307
m-Xylylenediamine	3 - <5	1477-55-0	3-2888; 3-308
Xylene	3 - <5	1330-20-7	3-3; 3-60
Polyaminoamide	3 - <5	68082-29-1	7-401
4-tert-butylphenol	3 - <5	98-54-4	3-503
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	2 - <3	68082-29-1	7-401
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	2 - <3	9046-10-0 (n = 2-6)	(7)-324
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane and 1,2-ethanediamine	2 - <3	36704-31-1	Not available.
4-Nonylphenol (branched)	1 - <2	84852-15-3	3-503

### 3. Composition/information on ingredients

Ethanol	0.5 - <1	64-17-5	2-202
Ethylbenzene	0.5 - <1	100-41-4	3-28; 3-60
Amines, polyethylenepoly-, triethylenetetramine fraction	0.2 - <0.5	90640-67-8	Not available.
Polyamidoamine	0.2 - <0.5	SUB104580	Not available.

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 and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.


### 4. First aid measures

#### Description of necessary 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 recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** :  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes severe burns. Causes damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Corrosive to the digestive tract. Causes burns. Causes damage to organs following a single exposure if swallowed.

##### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** :  Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

## 4. First aid measures

- Ingestion** : Adverse symptoms may include the following:  
stomach pains  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- 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.
- 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.

See toxicological information (Section 11)

## 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Combustible liquid. 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 thermal decomposition products** : ☒ Decomposition products may include the following materials:  
carbon oxides  
nitrogen oxides  
sulfur oxides  
halogenated compounds  
metal oxide/oxides

- 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.

## 6. Accidental release measures

### 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

## 6. Accidental release measures

**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".

**Environmental precautions :** Avoid dispersal of spilled 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.

### Methods and materials 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.

**Large spill :** Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

**Precautions for safe handling :** Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease 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 vapor 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. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Conditions for safe storage :** 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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
Talc containing no asbestos or quartz	<b>Japan Society for Occupational Health (Japan, 9/2022). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)]</b> OEL-M: 0.5 mg/m <sup>3</sup> 8 hours. Form: Respirable dust (Class 1 Dust) OEL-M: 2 mg/m <sup>3</sup> 8 hours. Form: Total dust (Class 1 Dust)
benzyl alcohol	<b>Japan Society for Occupational Health (Japan, 9/2022). Skin sensitizer.</b> OEL-C: 25 mg/m <sup>3</sup>
m-Xylylenediamine	<b>Japan Society for Occupational Health (Japan, 9/2022). Skin sensitizer.</b>
Xylene	<b>Industrial Safety and Health Act (Japan, 6/2020). [xylene]</b> TWA: 50 ppm 8 hours.
Ethylbenzene	<b>Japan Society for Occupational Health (Japan, 9/2022).</b> OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m <sup>3</sup> 8 hours. <b>Japan Society for Occupational Health (Japan, 9/2022). Absorbed through skin.</b> OEL-M: 87 mg/m <sup>3</sup> 8 hours. OEL-M: 20 ppm 8 hours. <b>Industrial Safety and Health Act (Japan, 6/2020).</b> TWA: 20 ppm 8 hours.

**Recommended monitoring procedures** : 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.

**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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**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.

### 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.

**Eye protection** : Chemical splash goggles and face shield.

**Skin protection**

## 8. Exposure controls/personal protection

### Hand protection

: 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.

### Gloves

: 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.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Respiratory protection

: Use an air-fed respirator unless a site-specific assessment determines that an air-fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. 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.

## 9. Physical and chemical properties

### Appearance

#### Physical state

: Liquid.

#### Odor

: Characteristic.

#### Boiling point

: >37.78°C (>100°F)


#### Flash point

: Closed cup: 62°C (143.6°F)

#### Relative density

: 1.41

#### Solubility(ies)

Media	Result
 cold water	Not soluble

## 10. Stability and reactivity

### Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

### Chemical stability

: The product is stable.

### Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.


### Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition products.

### Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

### Hazardous decomposition products

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



# 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	580 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
diisodecyl phthalate	LD50 Dermal	Rabbit	16000 mg/kg	-
	LD50 Oral	Rat	>60000 mg/kg	-
m-Xylylenediamine	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male, Female	>3100 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
4-tert-butylphenol	LD50 Dermal	Rabbit	2.29 g/kg	-
	LD50 Oral	Rat	2.95 g/kg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	LD50 Dermal	Rat	2980 mg/kg	-
	LD50 Oral	Rat	2885 mg/kg	-
4-Nonylphenol (branched)	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
Ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	17100 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-
Ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
Amines, polyethylenepoly-, triethylenetetramine fraction	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-
Polyamidoamine	LD50 Oral	Rat	>2 g/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
m-Xylylenediamine	Skin - Severe irritant	Rat	-	4 hours	4 hours
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Irritant	Human	-	-	-
4-Nonylphenol (branched)	Skin - Erythema/Eschar	Rabbit	4	-	-

### Sensitization



## 11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
m-Xylylenediamine Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin skin	Mouse Mouse	Sensitizing Sensitizing

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Calc containing no asbestos or quartz nonylphenol	Category 1 Category 3	- -	respiratory organs Respiratory tract irritation
benzyl alcohol	Category 1	-	central nervous system (CNS), kidneys Narcotic effects
m-Xylylenediamine Xylene	Category 3 Category 1 Category 1	- -	respiratory organs central nervous system (CNS), kidneys, liver, respiratory organs Narcotic effects
4-tert-butylphenol	Category 3 Category 3	-	Respiratory tract irritation
4-Nonylphenol (branched)	Category 3	-	Respiratory tract irritation
Ethanol	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Ethylbenzene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Amines, polyethylenepoly-, triethylenetetramine fraction Polyamidoamine	Category 3 Category 1 Category 3	- -	Narcotic effects respiratory tract Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

## 11. Toxicological information

Name	Category	Route of exposure	Target organs
<input checked="" type="checkbox"/> alc containing no asbestos or quartz barium sulfate nonylphenol benzyl alcohol	Category 1 Category 1 Category 2 Category 1	- - - -	respiratory organs respiratory organs bladder, kidneys central nervous system (CNS)
m-Xylylenediamine Xylene	Category 1 Category 1	- -	respiratory organs nervous system, respiratory organs
4-Nonylphenol (branched) Ethanol	Category 2 Category 1 Category 2	- - -	kidneys, liver liver central nervous system (CNS)
Ethylbenzene	Category 1	-	hearing organs, nervous system

### Aspiration hazard

Name	Result
<input checked="" type="checkbox"/> Xylene Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : ☒May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes severe burns. Causes damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Corrosive to the digestive tract. Causes burns. Causes damage to organs following a single exposure if swallowed.

### 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:  
 wheezing and breathing difficulties  
 asthma  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

## 11. Toxicological information

**Ingestion** : Adverse symptoms may include the following:  
 stomach pains  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

**General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : May damage fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
AMERLOCK 2 CURE	2623.1	3538.6	N/A	266.3	10.8
barium sulfate	N/A	2500	N/A	N/A	N/A
nonylphenol	580	2140	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	N/A
diisodecyl phthalate	N/A	16000	N/A	N/A	N/A
m-Xylylenediamine	930	1100	N/A	N/A	0.5
Xylene	4300	1700	N/A	11	N/A
4-tert-butylphenol	2950	2290	N/A	N/A	N/A
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	2500	2500	N/A	N/A	N/A
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	2885	2980	N/A	N/A	N/A
4-Nonylphenol (branched)	1300	2140	N/A	N/A	N/A
Ethanol	7000	17100	N/A	124.7	N/A
Ethylbenzene	3500	17800	N/A	17.8	N/A
Amines, polyethylenepoly-, triethylenetetramine fraction	1716	1465	N/A	N/A	N/A
Polyamidoamine	2500	N/A	N/A	N/A	N/A

**Other information** :

## 11. Toxicological information

Causes digestive tract burns. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

## 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic EC10 0.003 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
	EC10 1.78 mg/l	Algae	72 hours
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine			
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-4-Nonylphenol (branched)	EC50 15 mg/l	Algae	72 hours
Ethanol	Acute EC50 0.044 mg/l	Crustaceans - <i>Moina macrocopa</i>	48 hours
Ethylbenzene	Acute LC50 0.221 mg/l	Fish	96 hours
	Acute EC50 7640 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-
Amines, polyethylenepoly-, triethylenetetramine fraction	Acute EC50 20 mg/l	Aquatic plants - <i>Daphnia magna</i>	72 hours
	Acute EC50 31.1 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 330 mg/l	Fish - <i>Pimephales promelas</i>	96 hours
	Acute NOEC 2.5 mg/l	Crustaceans	72 hours

### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Ethylbenzene	-	79 % - Readily - 10 days	-	-

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

## 12. Ecological information

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Nonylphenol	3.28	154.88	Low
benzyl alcohol	0.87	-	Low
diisodecyl phthalate	8.8	-	High
m-Xylylenediamine	0.18	2.69	Low
Xylene	3.12	7.4 to 18.5	Low
4-tert-butylphenol	3	67.61	Low
4-Nonylphenol (branched)	5.4	251.19	Low
Ethanol	-0.35	-	Low
Ethylbenzene	3.6	79.43	Low
Amines, polyethylenepoly-, triethylenetetramine fraction	-2.65	-	Low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Mobility : Not available.

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

## 13. Disposal considerations

**Disposal methods** : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

	UN	IMDG	IATA
UN number	UN3066	UN3066	UN3066
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	8	8	8
Packing group	II	II	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

14. Transport information

Marine pollutant substances	Not applicable.	 (nonylphenol)	Not applicable.
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Additional information

- UN : None identified.
- 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.

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.


Transport in bulk according to IMO instruments : Not applicable.

15. Regulatory information

Fire Service Law

Category	Substance name/Type	Danger category	Signal word	Designated quantity
Category IV	Class II petroleums	III	Flammable - Keep Fire Away	1000 L

Pollutant Release and Transfer Registers (PRTR)


Ingredient name	%	Status	Reference number
 Alkylphenol (limited to those the alkyl group is C9)	15	Class 1	320
Xylene	3.6	Class 1	80
4-tert-Butylphenol	3.1	Class 2	368

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed.

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
 Benzyl alcohol	≤10	Listed	530-2, 530-4 (2024-04)
m-Xylylenediamine	≤10	Listed	555
Xylene	≤10	Listed	136
Ethanol	≤10	Listed	61
Ethylbenzene	≤10	Listed	70

Chemicals requiring notification

## 15. Regulatory information

Ingredient name	%	Status	Reference number
Benzyl alcohol	≤10	Listed	530-2, 530-4 (2024-04)
m-Xylylenediamine	≤10	Listed	555
Xylene	≤10	Listed	136
Ethanol	≤10	Listed	61
Ethylbenzene	≤10	Listed	70

### Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

### Mutagen

None of the components are listed.

Corrosive liquid : Not listed

Occupational Safety and Health Law : Inflammable

Regulations on the Prevention of Tetraalkyl Lead Poisoning : Not listed

Harmful Substances Subject to Obtaining Permission for Manufacturing : Not listed

Harmful Substances, Prohibited for Manufacturing : Not listed

ISHL Enforcement Order Appendix 1 - Dangerous Substances : Inflammable

Lead regulation : Not listed

Organic solvents poisoning prevention : Not applicable.

### Poisonous and Deleterious Substances

Ingredient name	%	Status	Reference number
Nonylphenol	13.824	Deleterious	2-1-78-2

### Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Xylene	≤10	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50
Toluene	≤10	Priority assessment	46
Methyl isobutyl ketone	≤10	Priority assessment	116
Benzene	≤10	Priority assessment	45

High Pressure Gas Control Law : Not available.

### Explosives Control Law



## 15. Regulatory information

None of the components are listed.

**Law concerning prevention of pollution of the ocean** : Not available.

### Maritime Safety Law

#### Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

### Container class

None of the components are listed.

**JSOH Carcinogen** :  Group 2B

**List of Specially Controlled Industrial Waste** : Not listed

**Japan inventory** : At least one component is not listed.

**Road law** : Not available.

## 16. Other information

### History

**Date of issue/Date of revision** : 14 March 2024

**Date of previous issue** : 10/5/2021

**Version** : 2

**Prepared by** : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
UN = United Nations

 Indicates information that has changed from previously issued version.

### Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.