# **SAFETY DATA SHEET**



### Conforms to Official Mexican Standard NOM-018-STPS-2015

Date of revision 5 October 2021

Version 7.01

Date of issue 5 October 2021

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

Product name	: PHENGUARD 930/935/940 HARDENER
Product code	: 40930-BHARD/2.4L
Other means of identification	: Not applicable.
Product type	: Liquid.
Relevant identified uses o	f 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.
Manufacturer	: PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272
<u>Emergency telephone</u> <u>number</u>	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)
Technical Phone Number	: 888-977-4762

# **SECTION 2: Hazards identification**

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 24.4% (oral) 28.3% (dermal) 41.2% (inhalation)</li> </ul>
	24.4% (oral), 28.3% (dermal), 41.2% (inhalation)

#### **GHS label elements**

### Product name PHENGUARD 930/935/940 HARDENER

# **SECTION 2: Hazards identification**

Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>H226 - Flammable liquid and vapor.</li> <li>H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.</li> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H335 - May cause respiratory irritation.</li> <li>H351 - Suspected of causing cancer.</li> <li>H361 - Suspected of damaging fertility or the unborn child.</li> <li>H373 - May cause damage to organs through prolonged or repeated exposure. (hearing organs)</li> </ul>
Precautionary statements	
Prevention	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P280 - Wear protective gloves, protective clothing and eye or face protection.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P260 - Do not breathe vapor.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P264 - Wash thoroughly after handling.</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace.</li> </ul>
Response	<ul> <li>P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P305 + P351 + P338, P310 - 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.</li> </ul>
Storage	<ul> <li>P405 - Store locked up.</li> <li>P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.</li> </ul>
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation. 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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Emits toxic fumes when heated.

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## **SECTION 2: Hazards identification**

See toxicological information (Section 11)

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

Substance/mixture Product name		Mixture PHENGUARD 930/935/940 HARDENER
Other means of identification	:	Not applicable.

Ingredient name	%	CAS number
xylene	≥20 - ≤25	1330-20-7
3-aminopropyldiethylamine	≥10 - ≤20	104-78-9
benzyl alcohol	≥10 - ≤15	100-51-6
2-methylpropan-1-ol	≥5.0 - ≤10	78-83-1
m-phenylenebis(methylamine)	≥1.0 - ≤5.0	1477-55-0
ethylbenzene	≥1.0 - ≤4.4	100-41-4
N-(3-(trimethoxysilyl)propyl)ethylenediamine	≥1.0 - ≤4.2	1760-24-3
salicylic acid	<1.0	69-72-7
toluene	<1.0	108-88-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

# SECTION 4: First aid measures

#### Description of necessary first aid measures

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.
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	: 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 :	Harmful if inhaled. May cause respiratory irritation.	
Skin contact :	Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.	
Ingestion :	Harmful if swallowed.	
Over-exposure signs/symptoms		

See toxicological information (Section 11)

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

### **SECTION 4: First aid measures**

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.

# SECTION 5: Firefighting 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	: Flammable liquid and vapor. 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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides Formaldehyde.
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**

#### 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.
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).

#### Methods and materials for containment and cleaning up

## SECTION 6: Accidental release measures

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.

# **SECTION 7: Handling and storage**

#### 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 vapor or mist. Do not ingest. 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.
Special precautions	:	Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
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.
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 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.

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

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits
xylene	NOM-010-STPS-2014 (Mexico, 4/2016).
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
3-aminopropyldiethylamine	None.
benzyl alcohol	IPEL (-).
	TWA: 5 ppm
	STEL: 10 ppm
2-methylpropan-1-ol	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 50 ppm 8 hours.
m-phenylenebis(methylamine)	NOM-010-STPS-2014 (Mexico, 4/2016).
	Absorbed through skin.
	CEIL: 0.1 mg/m <sup>3</sup>
ethylbenzene	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 20 ppm 8 hours.
N-(3-(trimethoxysilyl)propyl)ethylenediamine	None.
salicylic acid	None.
toluene	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 20 ppm 8 hours.

#### Key to abbreviations

С	= Ceiling Limit	STEL	= Short term exposure limit
IPEL	<ul> <li>Internal Permissible Exposure Limit</li> </ul>	TLV	= Threshold Limit Value
		TWA	<ul> <li>Time Weighted Average</li> </ul>

#### Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	:	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.
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 measure 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	:	Chemical splash goggles and face shield.

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# **SECTION 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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	: 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.

# **SECTION 9: Physical and chemical properties**

#### Appearance

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Clear
Odor	: Amine-like.
Odor threshold	: Not available.
Molecular weight	: Not applicable.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 28°C (82.4°F)
Auto-ignition temperature	: 225°C (437°F)
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.93
Density(lbs / gal)	: 7.76
Bulk Density (g/cm³)	: 0.93
Solubility	: Insoluble in the following materials: cold water.
Solubility in water	: Not available.
Partition coefficient: n- octanol/water	: Not applicable.

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## **SECTION 9: Physical and chemical properties**

Viscosity	: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
Volatility	: 73% (v/v), 70.065% (w/w)
% Solid. (w/w)	: 29.935

# SECTION 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. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	<ul> <li>Depending on conditions, decomposition products may include the following mater carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxides</li> </ul>

# **SECTION 11: Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
3-aminopropyldiethylamine	LD50 Dermal	Rabbit	524 mg/kg	-
	LD50 Oral	Rat	830 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	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
m-phenylenebis (methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
()	LD50 Dermal	Rat - Male, Female	>3100 mg/kg	-
	LD50 Oral	Rat	930 mg/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	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-
Conclusion/Summary	: There are no data available on	the mixture its	elf.	<u> </u>

### **SECTION 11: Toxicological information**

#### Irritation/Corrosion Result **Species** Score **Exposure Observation Product/ingredient name** Skin - Moderate irritant 24 hours 500 xylene Rabbit mg 3-aminopropyldiethylamine Skin - Visible necrosis Rabbit 1 minutes 8 days m-phenylenebis Skin - Severe irritant Rat 4 hours 4 hours (methylamine) **Conclusion/Summarv** Skin : There are no data available on the mixture itself. There are no data available on the mixture itself. Eyes • Respiratory There are no data available on the mixture itself. **Sensitization** Product/ingredient name **Route of Species** Result exposure m-phenylenebis skin Mouse Sensitizing (methylamine) **Conclusion/Summary** Skin : There are no data available on the mixture itself. : There are no data available on the mixture itself. Respiratory **Mutagenicity Conclusion/Summary** : There are no data available on the mixture itself. **Carcinogenicity Conclusion/Summary** : There are no data available on the mixture itself. **Classification Product/ingredient name OSHA** IARC NTP xylene -3 ethylbenzene 2B . -3 toluene \_ **Carcinogen Classification code:** IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -**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) Name **Route of Target organs** Category exposure Respiratory tract xylene Category 3 irritation 2-methylpropan-1-ol Category 3 Respiratory tract irritation Narcotic effects Category 3 Narcotic effects toluene Category 3 Specific target organ toxicity (repeated exposure) **Mexico** Page: 9/15

## **SECTION 11: Toxicological information**

Name		Route of exposure	Target organs
	Category 2 Category 2	-	hearing organs -

Target organs

: Contains material which causes damage to the following organs: blood, liver, heart, brain.

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

#### Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
benzyl alcohol	ASPIRATION HAZARD - Category 2
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	Harmful if inhaled. May cause respiratory irritation.
Skin contact	;	Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	Harmful if swallowed.
Over-exposure signs/sympto	m	
Eye contact	:	Adverse symptoms may include the following: pain watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate effect	ts	and also chronic effects from short and long term exposure

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# **SECTION 11: Toxicological information**

Conclusion/Summary	:	There are no data available on the mixture itself. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. 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. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. 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 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.
Short term exposure		
Potential immediate effects	:	There are no data available on the mixture itself.
Potential delayed effects	1	There are no data available on the mixture itself.
<u>Long term exposure</u>		
Potential immediate effects	:	There are no data available on the mixture itself.
Potential delayed effects	1	There are no data available on the mixture itself.
Potential chronic health effe	cts	
General	:	May cause damage to organs through prolonged or repeated exposure. 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	1	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging 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)
PHENGUARD 930/935/940 HARDENER	1621.4	1242.7	59012.3	21.5	2
xylene	4300	1700	N/A	11	1.5
3-aminopropyldiethylamine	830	524	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
m-phenylenebis(methylamine)	930	2500	4500	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
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N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	N/A	N/A	11	1.5
salicylic acid	891	N/A	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A

# **SECTION 12: Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
3-aminopropyldiethylamine	Acute EC50 30.2 mg/l Acute EC50 146.6 mg/l	Daphnia Fish	48 hours 96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia	48 hours -
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - Daphnia longispina - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days

#### Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
3-aminopropyldiethylamine ethylbenzene	OECD 301A -	90 % - Readily - 28 79 % - Readily - 10		-	-
Product/ingredient name	Aquatic half-lif	e	Photolysis	S	Biodegradability
xylene 3-aminopropyldiethylamine benzyl alcohol ethylbenzene toluene	- - - -		- - - -		Readily Readily Readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	low
benzyl alcohol	0.87	-	low
2-methylpropan-1-ol	1	-	low
m-phenylenebis (methylamine)	0.18	2.69	low
ethylbenzene	3.6	79.43	low
salicylic acid	2.21 to 2.26	-	low
toluene	2.73	8.32	low

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

#### Other adverse effects

: No known significant effects or critical hazards.

Product name PHENGUARD 930/935/940 HARDENER

### **SECTION 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 nonrecyclable 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

### **SECTION 14: Transport information**

	Mexico Classification	IMDG	ΙΑΤΑ
UN number	UN3470	UN3470	UN3470
UN proper shipping name	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE
Transport hazard class(es)	8 (3)	8 (3)	8 (3)
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	Not applicable.	Not applicable.	Not applicable.
RQ substances	Not applicable.	Not applicable.	Not applicable.

#### Additional information

Mexico	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: None identified.

**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.

Version 7.01

#### Product name PHENGUARD 930/935/940 HARDENER

### **SECTION 14: Transport information**

Transport in bulk according : Not applicable. to IMO instruments

### **SECTION 15: Regulatory information**

#### <u>Mexico</u>

Classification

Flammability : 3 Health : 3 Reactivity : 1

#### International regulations

**Montreal Protocol** 

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## **SECTION 16: Other information**

Hazardous Material Information System (U.S.A.)

Health : 3 \* Flammability : 3 Physical hazards : 1 (\*) - Chronic

#### effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Date of previous issue Organization that prepared the SDS	: 6/18/2021 : EHS
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container 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) N/A = Not available SGG = Segregation Group UN = United Nations

#### Indicates information that has changed from previously issued version.

#### Notice to reader

The information, which is based on the current knowledge of the chemical substance or mixture and applies to appropriate safety precautions for the product, is deemed correct but is not exhaustive and will be used only as a guide.

#### **Disclaimer**

#### Product name PHENGUARD 930/935/940 HARDENER

# **SECTION 16: Other information**

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.