SAFETY DATA SHEET



Date of issue 5 October 2021

Version 6.01

Section 1. Product and company identification

Product name
Product code
Other means of identification
Product type

- : SIGMAGUARD 795 HARDENER
- : 00123854
- : Not available.
- : Liquid.

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

Identified uses

Coating. Paints. Painting-related materials.

Uses advised against	Reason
Not applicable.	

Supplier's details:	
Supplier	 PPG Industries Colombia Ltda Calle 51 # 40-13 Municipio de Itagüí Antioquia, Colombia (57) (4) 3787400 (Porteria)
Email address:	: HazComLatam@ppg.com
Emergency telephone number	: Colombia: 01 8000 916012 (CISPROQUIM) + 571 288 6012 (CISPROQUIM) Ecuador: 1800-59-3005 (CISPROQUIM) Peru: 080-050-847 (CISPROQUIM)

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	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
	AQUATÍC HAZĂRĎ (ACUTE) - Category 3

English (US) Colombia

Section 2. Hazard	s identification
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. Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 24.4% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 28.3% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 41.2% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 60.1%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Harmful to aquatic life.
Precautionary statements	
Prevention	: Obtain special instructions before use. 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. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Immediately 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: Call a POISON CENTER or doctor if you feel unwell. 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 in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

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Section 2. Hazards identification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation. result in classification

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Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

CAS number : Not applicable.		
Ingredient name	%	CAS number
xylene	20 - <30	1330-20-7
3-aminopropyldiethylamine	15 - <20	104-78-9
benzyl alcohol	10 - <12.5	100-51-6
2-methylpropan-1-ol	7 - <10	78-83-1
m-phenylenebis(methylamine)	3 - <5	1477-55-0
ethylbenzene	3 - <5	100-41-4
N-(3-(trimethoxysilyl)propyl)ethylenediamine	3 - <5	1760-24-3
salicylic acid	0.5 - <1	69-72-7
toluene	0.1 - <0.2	108-88-3

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.

Section 4. First aid measures

Description of necessary fir	<u>st aid measures</u>
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.
	lical attention and special treatment needed, if necessary
Notes to physician Specific treatments	 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. 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.
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Section 4. First aid measures

Potential acute health e	<u>iffects</u>
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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , 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. This material is harmful to aquatic life. 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 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 source No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Prov adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	es. ide
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.	
		English (US) Colombia	4/1

Section 6. Accidental release measures

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.

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Section 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 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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. See Section 10 for incompatible materials before handling or use.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
xylene		ACGIH TLV (United States, 3/2020). STEL: 651 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
2-methylpropan-1-ol		ACGIH TLV (United States, 3/2020). TWA: 152 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
m-phenylenebis(methylamine	e)	ACGIH TLV (United States, 3/2020). Absorbed through skin. C: 0.018 ppm
ethylbenzene		ACGIH TLV (United States, 3/2020). TWA: 20 ppm 8 hours.
Recommended monitoring procedures	atmosphere or biol of the ventilation of protective equipme standards. Refere	ains ingredients with exposure limits, personal, workplace logical monitoring may be required to determine the effectiveness r other control measures and/or the necessity to use respiratory ent. Reference should be made to appropriate monitoring once to national guidance documents for methods for the azardous substances will also be required.
Appropriate engineering controls	ventilation or other contaminants belo also need to keep	quate ventilation. Use process enclosures, local exhaust engineering controls to keep worker exposure to airborne w any recommended or statutory limits. The engineering controls gas, vapor or dust concentrations below any lower explosive ion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ve they comply with th cases, fume scrub	ntilation or work process equipment should be checked to ensure ne requirements of environmental protection legislation. In some bers, filters or engineering modifications to the process necessary to reduce emissions to acceptable levels.
ndividual protection measur	<u>'es</u>	
Hygiene measures	before eating, smo Appropriate technic Contaminated worl contaminated cloth showers are close	arms and face thoroughly after handling chemical products, oking and using the lavatory and at the end of the working period. ques should be used to remove potentially contaminated clothing. k clothing should not be allowed out of the workplace. Wash ning before reusing. Ensure that eyewash stations and safety to the workstation location.
Eye protection Skin protection	: Chemical splash g	oggles and face shield.
Hand protection	be worn at all times this is necessary. check during use t should be noted th different for differe	t, impervious gloves complying with an approved standard should s when handling chemical products if a risk assessment indicates Considering the parameters specified by the glove manufacturer, hat the gloves are still retaining their protective properties. It at the time to breakthrough for any glove material may be nt glove manufacturers. In the case of mixtures, consisting of s, the protection time of the gloves cannot be accurately

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Section 8. Exposure controls/personal protection

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	 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.

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Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: 1	Liquid.
Color	: \	Various
Odor	: /	Amine-like.
рН	: 1	Not applicable.
Melting point	: 1	Not available.
Boiling point	: >	>37.78°C (>100°F)
Flash point	: (Closed cup: 28°C (82.4°F)
Evaporation rate	: 1	Not available.
Flammability (solid, gas)	: 1	Not available.
Lower and upper explosive (flammable) limits	: 1	Not available.
Vapor pressure	: 1	Not available.
Vapor density	: 1	Not available.
Relative density	: (0.93
Bulk density (g/cm³)	: (0.93
Solubility	: 1	Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	: 1	Not applicable.
Auto-ignition temperature	: 2	225°C (437°F)
Decomposition temperature	: 1	Not available.
Viscosity	: 1	Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
Viscosity	: 3	30 - <40 s (ISO 6mm)

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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.
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 Formaldehyde. metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

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 ³	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	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
(methylamine)				
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	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)	LD50 Oral	Rat	2413 mg/kg	-
ethylenediamine				
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Irritation/Corrosion

: There are no data available on the mixture itself.

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Section 11. Toxicological information

Product/ingredient name	Result		Species	Score	Exposure	Observation	
xylene	Skin - Mod	erate irrita	nt Rabbit	-	24 hours 500	-	
3-aminopropyldiethylamine m-phenylenebis (methylamine)	Skin - Visib Skin - Seve		s Rabbit Rat	-	mg 1 minutes 4 hours	8 days 4 hours	
Conclusion/Summary			·	•			
Skin	: There ar	e no data	available on the mi	xture itsel			
Eyes	: There ar	: There are no data available on the mixture itself.					
Respiratory	: There ar	e no data	available on the mi	xture itsel			
<u>Sensitization</u>	1						
Product/ingredient name	Route of exposure	Sp	ecies		Result		
m-phenylenebis (methylamine)	skin	Mo	buse		Sensitizing		
Conclusion/Summary							
Skin	: There ar	e no data	available on the mi	xture itsel			
Respiratory	: There ar	e no data	available on the mi	xture itsel			
<u>Autagenicity</u>							
Not available.							
Conclusion/Summary	• There ar	e no data	available on the mi	xture itselt	-		
Carcinogenicity	, more a	o no data			•		
Not available.							
					_		
Conclusion/Summary	: There ar	e no data	available on the mi	xture itsel			
Conclusion/Summary <u>Classification</u>	I	1	1	xture itsel			
Conclusion/Summary <u>Classification</u> Product/ingredient name	: There ar	IARC	NTP	xture itsel			
Conclusion/Summary Classification Product/ingredient name xylene	I	IARC 3	1	xture itsel			
Conclusion/Summary <u>Classification</u> Product/ingredient name	I	IARC	NTP	xture itsel	:		
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene	OSHA - - -	IARC 3 2B	NTP - -	xture itsel			
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification	OSHA - - - code:	IARC 3 2B	NTP - -	xture itsel			
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3,4 NTP: Known to be	OSHA - - - code: 4	IARC 3 2B 3	NTP - -				
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3,4 NTP: Known to be OSHA: +	OSHA - - - code: 4 a human carci	IARC 3 2B 3	NTP - - -				
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3,4 NTP: Known to be	OSHA - - - code: 4 a human carci	IARC 3 2B 3	NTP - - -				
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul	OSHA - - - code: 4 a human carci	IARC 3 2B 3	NTP - - -				
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul	OSHA - - - code: 4 a human carci	IARC 3 2B 3	NTP - - -				
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul Reproductive toxicity Not available.	OSHA - - - code: 4 a human carci lated: -	IARC 3 2B 3	NTP - - -	be a human	carcinogen		
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul Reproductive toxicity Not available. Conclusion/Summary	OSHA - - - code: 4 a human carci lated: -	IARC 3 2B 3	NTP - - -	be a human	carcinogen		
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul Reproductive toxicity Not available. Conclusion/Summary Teratogenicity	OSHA - - - code: 4 a human carci lated: -	IARC 3 2B 3	NTP - - -	be a human	carcinogen		
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul Reproductive toxicity Not available. Conclusion/Summary	OSHA - - - code: 4 a human carci lated: -	IARC 3 2B 3	NTP - - -	be a human	carcinogen		
Conclusion/Summary Classification Product/ingredient name xylene ethylbenzene toluene Carcinogen Classification IARC: 1, 2A, 2B, 3, 4 NTP: Known to be OSHA: + Not listed/not regul Reproductive toxicity Not available. Conclusion/Summary Teratogenicity	OSHA - - - code: 4 a human carci lated: - : There ar	IARC 3 2B 3	NTP - - -	be a human	carcinogen		

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Section 11. Toxicological information

Name		Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
toluene	Category 3 Category 3	-	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

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

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	: Not available.
Potential acute health effec	<u>s</u>
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.
Symptoms related to the ph	vsical, chemical and toxicological characteristics

Eye contact	:	Adverse symptoms may include the following:
		pain
		watering
		redness

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Section 11. Toxicological information

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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 effects and also chronic effects from short and long term exposure

Conclusion/Summary	Phere 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 components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. 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.
Short term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Long term exposure	

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Product na	me	SIGMAG

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	C
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health eff	<u>ects</u>
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.

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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/I)	
SIGMAGUARD 795 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	
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	

Other information

: Not available.

Section 12. Ecological information

Ecotoxicity

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

Persistence/degradability

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Section 12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
3-aminopropyldiethylamine ethylbenzene	OECD 301A -		adily - 28 days adily - 10 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
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	: Not available.
coefficient (Koc)	

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

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.

Section 14. Transport information

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

Additional information

UN	: None identified.
Brazil	: None identified.
Risk number	: 83
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.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

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Date of previous issue	: 6/18/2021
Version	: 6.01 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

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	LogPow = lo MARPOL = l 1973 as mod	International Convent dified by the Protocol egulations concernin	angerous Goods bl/water partition coefficie tion for the Prevention of of 1978. ("Marpol" = mar g the International Carria	Pollution From ine pollution)	•
References	: ABNT NBR	14725-4: 2014			

ANTT - National Land Transportation Agency
Indicates information that has changed from previously issued version.

Disclaimer

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.