# **SAFETY DATA SHEET**

Date of issue/Date of revision 27 August 2024 Vers

Version1.01

# Section 1. Identification

Product code	: 00438664
Product name	: SIGMAGUARD 730 CONDUCTIVE HARDENER
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Product use	: Coating. Professional applications, Used by spraying.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
Supplier's details	: PT PPG Coatings Indonesia Jl. Rawagelam III No.1 13930 Jakarta Indonesia Tel +62 21 4605710 PMC.Safety@PPG.com
Emergency telephone number	: CHEMTREC 001-803-017-9114 (CCN 17704)

# Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 59%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 59%</li> </ul>

 GHS label elements, including precautionary statements

 Hazard pictograms
 :

 Signal word
 :

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# Section 2. Hazards identification

Hazard statements	:	Flammable liquid and vapor. Causes skin irritation. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer.
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. 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. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.
Response	:	IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation 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. 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.
Other hazards which do not result in classification	;	Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.
Ingredient name	

Ingredient name	%	CAS number
xylene	10- <20	1330-20-7
1-methoxy-2-propanol	5- <10	107-98-2
4-methylpentan-2-one	5- <10	108-10-1
2-methylpropan-1-ol	5- <10	78-83-1
ethylbenzene	1- <3	100-41-4
2-methoxypropanol	0.1- <0.3	1589-47-5

There are no 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.

SUB codes represent substances without registered CAS Numbers.

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

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# Section 4. First aid measures

Description of necessary f	<u>irst a</u>	id 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		cts, acute and delayed
Potential acute health effe	<u>ects</u>	

Eye contact Inhalation	Causes serious eye damage. Harmful if inhaled. Can cause central nervous system (CNS) depression. May	
Cirin contect	cause drowsiness or dizziness. May cause respiratory irritation.	
Skin contact	Causes skin irritation. Defatting to the skin.	
Ingestion	Can cause central nervous system (CNS) depression.	
Over-exposure signs/symp		
Eye contact	Adverse symptoms may include the following: pain watering redness	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Indication of immediate med	I attention and special treatment needed, if necessary	
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	No specific treatment.	
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If 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.	it

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## Section 4. First aid measures

See toxicological information (Section 11)

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

# Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

contractor.

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 co	ntainment 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

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## Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 noncombustible, 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). Avoid exposure - obtain special instructions before use. 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.
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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

<u>Control parameters</u> <u>Occupational exposure limits</u>

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# Section 8. Exposure controls/personal protection

Indonesia (Indonesia, TWA: 343 Mg/m <sup>3</sup> 8 hm TWA: 100 BDS 8 hou STEL: 651 mg/m <sup>3</sup> 15 STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 550 BDS 15 m Ministry of Employme (Indonesia, 100 BDS 8 hou STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 553 mg/m <sup>3</sup> 15 STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 553 mg/m <sup>3</sup> 15 STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 553 mg/m <sup>3</sup> 16 STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 553 mg/m <sup>3</sup> 16 STEL: 150 BDS 15 m Ministry of Employme (Indonesia, 2/1997). STEL: 553 mg/m <sup>3</sup> 16 STEL: 150 BDS 15 m Minister of Labor of t Indonesia (Indonesia, 17WA: 100 BDS 8 hour STEL: 75 BDS 15 m STEL: 75 BDS 15 m Minister of Labor of t Indonesia (Indonesia, 17WA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 75 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour Minister of Labor of t Indonesia (Indonesia, 17WA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 SD 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 hour STEL: 25 BDS 15 m TWA: 20 BDS 8 ho	redient name	Exposure limits	
4-methylpentan-2-one       Indonesia (Indonesia, TWA: 100 BDS 8 hours)         4-methylpentan-2-one       Minister of Labor of t         2-methylpropan-1-ol       Minister of Labor of t         2-methylpropan-1-ol       Minister of Labor of t         Indonesia (Indonesia, 2/1997).       STEL: 533 mg/m <sup>3</sup> 15         STEL: 553 mg/m <sup>3</sup> 15       STEL: 553 mg/m <sup>3</sup> 15         2-methylpropan-1-ol       Minister of Labor of t         Indonesia (Indonesia, TWA: 20 BDS 8 hours)       STEL: 75 BDS 15 min         TWA: 50 BDS 8 hours       TWA: 50 BDS 8 hours         ethylbenzene       Minister of Labor of t         Indonesia (Indonesia, Indonesia)       TWA: 20 BDS 8 hours         TWA: 20 BDS 8 hours       TWA: 20 BDS 8 hours         minister of Enabor of t       Indonesia (Indonesia, TWA: 20 BDS 8 hours         ministry of Employmed (Indonesia, 2/1997).       STEL: 543 mg/m <sup>3</sup> 15         STEL: 543 mg/m <sup>3</sup> 15       STEL: 125 BDS 15 m         Recommended monitoring standard       : Reference should be made to appropriate monitoring standard         recodures       : Use only with adequate ventilation. Use process enclosures, ventilation or other engineering controls to keep worker expos contaminants below any recommended or statutory limits. Th also need to keep gas, vapor or dust concentrations below an limits. Use explosion-proof ventilation equipment.         Envioronmental exposure controls	ne	Minister of Labor of the Republic of Indonesia (Indonesia, 4/2018). [xilen] TWA: 434 mg/m <sup>3</sup> 8 hours. TWA: 100 BDS 8 hours. STEL: 651 mg/m <sup>3</sup> 15 minutes. STEL: 150 BDS 15 minutes. Ministry of Employment and Labor (Indonesia, 2/1997). STEL: 651 mg/m <sup>3</sup> 15 minutes. STEL: 150 BDS 15 minutes.	
4-methylpentan-2-one       Minister of Labor of t         2-methylpropan-1-ol       Minister of Labor of t         2-methylpropan-1-ol       Minister of Labor of t         ethylbenzene       Minister of Labor of t         Indonesia (Indonesia, TWA: 20 BDS 8 hours       STEL: 75 BDS 15 min         Minister of Labor of t       Indonesia (Indonesia, through skin.         TWA: 50 BDS 8 hours       TWA: 50 BDS 8 hours         ethylbenzene       Minister of Labor of t         Indonesia (Indonesia, through skin.       TWA: 20 BDS 8 hours         Winister of Labor of t       Indonesia, (Indonesia, through skin.         TWA: 20 BDS 8 hours       TWA: 20 BDS 8 hours         Winister of Labor of t       Indonesia, 2/1997).         STEL: 543 mg/m³ 15       STEL: 125 BDS 15 min         Recommended monitoring       : Reference should be made to appropriate monitoring standarm         national guidance documents for methods for the determination substances will also be required.       : Use only with adequate ventilation. Use process enclosures, ventilation or other engineering controls to keep worker expose contaminants below any recommended or statutory limits. The also need to keep gas, vapor or dust concentrations below an limits. Use explosion-proof ventilation equipment.         Environmental exposure       : Emissions from ventilation or work process equipment should they comply with the requirements of environmental protection	ethoxy-2-propanol	STEL: 553 mg/m <sup>3</sup> 15 minutes.	
2-methylpropan-1-olMinister of Labor of t Indonesia (Indonesia, through skin. TWA: 152 mg/m³ 8 hours TWA: 50 BDS 8 hours Minister of Labor of t Indonesia (Indonesia, TWA: 20 BDS 8 hours Ministry of Employmed (Indonesia, 2/1997). STEL: 543 mg/m³ 15 STEL: 125 BDS 15 mRecommended monitoring procedures:Recommended monitoring procedures:Reference should be made to appropriate monitoring standard national guidance documents for methods for the determination substances will also be required.Appropriate engineering controls:Use only with adequate ventilation. uss need to keep gas, vapor or dust concentrations below any limits. Use explosion-proof ventilation equipment.Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure 	ethylpentan-2-one	Minister of Labor of the Republic of Indonesia (Indonesia, 4/2018). TWA: 20 BDS 8 hours.	
ethylbenzeneMinister of Labor of t Indonesia (Indonesia, TWA: 20 BDS 8 hours Ministry of Employme (Indonesia, 2/1997). STEL: 543 mg/m³ 15 STEL: 125 BDS 15 mRecommended monitoring 	ethylpropan-1-ol	Minister of Labor of the Republic of Indonesia (Indonesia, 4/2018). Absorbed through skin. TWA: 152 mg/m <sup>3</sup> 8 hours.	
<ul> <li>Appropriate engineering controls</li> <li>Use only with adequate ventilation. Use process enclosures, ventilation or other engineering controls to keep worker exposise contaminants below any recommended or statutory limits. The also need to keep gas, vapor or dust concentrations below an limits. Use explosion-proof ventilation equipment.</li> <li>Environmental exposure controls</li> </ul>	lbenzene	Minister of Labor of the Republic of Indonesia (Indonesia, 4/2018). TWA: 20 BDS 8 hours. Ministry of Employment and Labor	
<ul> <li>controls</li> <li>ventilation or other engineering controls to keep worker expose contaminants below any recommended or statutory limits. The also need to keep gas, vapor or dust concentrations below an limits. Use explosion-proof ventilation equipment.</li> <li>Environmental exposure controls</li> <li>Emissions from ventilation or work process equipment should they comply with the requirements of environmental protection</li> </ul>	edures nation	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.	
controls they comply with the requirements of environmental protection	ols ventila contai also n	: 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.	
	ols they c cases	: 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

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# Section 8. Exposure controls/personal protection

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Chemical splash goggles and face shield.
Skin 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	: For prolonged or repeated handling, use the following type of gloves:
	May be used: nitrile rubber Recommended: polyvinyl alcohol (PVA), butyl rubber, Viton®
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	
Physical state	: Liquid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 24.5°C (76.1°F)
Evaporation rate	: Not available.
Flammability/Combustible properties (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)

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Section 9. Physical and chemical properties

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•		· ·
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	0.98
Solubility(ies)		Media Result
Solubility(les)	ľ	cold water Not soluble
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C): >21 mm²/s

# 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

# Section 11. Toxicological information

## Information on toxicological effects

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>xy</b> lene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
5.	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
51 1	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 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	-
2-methoxypropanol	LC50 Inhalation Vapor	Rat	15000 ppm	4 hours

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	LD50 Dermal LD50 Oral		Rabbit Rat		5660 mg/kg 5.3 g/kg	-	
Conclusion/Summary Irritation/Corrosion	: There are no data avail	able on	the mixt	ure itself	f.		
Product/ingredient name	Result	Spec	ies	Score	Exposur	e	Observation
xylene	Skin - Moderate irritant	Rabb	t	-	24 hours mg	500	-
Conclusion/Summary	·						
Skin	: There are no data avai	lable on	the mix	ture itse	lf.		
Eyes	: There are no data available on the mixture itself.						
Respiratory	: There are no data avai	: There are no data available on the mixture itself.					
Sensitization							
Conclusion/Summary							
Skin	: There are no data available on the mixture itself.						
Respiratory	: There are no data avai	There are no data available on the mixture itself.					
<u>Mutagenicity</u>							
Conclusion/Summary	: There are no data avai	lable on	the mix	ture itse	lf.		
<b>Carcinogenicity</b>							
Conclusion/Summary	: There are no data available on the mixture itself.						
Reproductive toxicity							
Conclusion/Summary	: There are no data available on the mixture itself.						
Teratogenicity							
Conclusion/Summary	: There are no data avai	lable on	the mix	ture itse	lf.		
Specific target organ toxic	ity (single exposure)						

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects
4-methylpentan-2-one	Category 3	-	Narcotic effects
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
2-methoxypropanol	Category 3	-	Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

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

## Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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#### Product name SIGMAGUARD 730 CONDUCTIVE HARDENER Section 11. Toxicological information Information on the likely : Not available. routes of exposure Potential acute health effects Eye contact : Causes serious eye damage. Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. **Skin contact** : Causes skin irritation. Defatting to the skin. : Can cause central nervous system (CNS) depression. Ingestion 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: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness **Skin contact** : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure **Potential immediate** : There are no data available on the mixture itself. effects **Potential delayed effects** : 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	: There are no data available on the mixture itself.
Potential chronic health eff	fects
General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

# Section 11. Toxicological information

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## Numerical measures of toxicity

### Acute toxicity estimates

Route	ATE value
	5748.55 mg/kg 20.11 mg/l 2.65 mg/l

## Other information

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. Avoid contact with skin and clothing.

## Section 12. Ecological information

## **Toxicity**

Product/ingredient name	Result	Species	Exposure
methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
4-methylpentan-2-one	Acute LC50 >179 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	-

## Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
4-methylpentan-2-one ethylbenzene	OECD 301F -	83 % - Readily - 28 79 % - Readily - 10		-	-
Product/ingredient name	Aquatic half-life	)	Photolysis	S	Biodegradability
xylene 4-methylpentan-2-one ethylbenzene	-		- - -		Readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	Low
1-methoxy-2-propanol	<1	-	Low
4-methylpentan-2-one	1.9	-	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
2-methoxypropanol	-0.49	-	Low

## Mobility in soil

# Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

## Product name SIGMAGUARD 730 CONDUCTIVE 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 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.

## Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group		III	
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

<b>Additional</b>	iformation		
UN	: None identified.		
IMDG	: None identified.		
ΙΑΤΑ	: None identified.		
Special pre	cautions 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 ir the event of an accident or spillage.		

Transport in bulk according : Not applicable. to IMO instruments

Product name SIGMAGUARD 730 CONDUCTIVE HARDENER

# 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).

## Law No. 74/2001 - Banned

None of the components are listed.

## Law No. 74/2001 - Restricted

None of the components are listed.

Law No. 74/2001 - : Not determined Chemicals that may be used

#### **International regulations**

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 27 August 2024
Date of previous issue	: 1/9/2024
Version	: 1.01
Prepared by	: EHS
Key to abbreviations	<ul> <li>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</li> </ul>
Indicates information the	at has abanged from previously issued version

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.