# **SAFETY DATA SHEET**

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 13 April 2022

Version 8.01

Section 1. Chem	ical product and company identification
Product code	: 00369891
Product name	: SIGMACONDUCTIVE 70 HARDENER
Product name	: SIGMACONDUCTIVE 70 HARDENER
Product type	: Liquid.
Relevant identified uses of	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.
Supplier's details	: PPG Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857
Emergency telephone number (with hours of operation)	: 00 86 532 83889090

# Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview Liquid. Characteristic. Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Harmful to aquatic life.

Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Immediately call a POISON CENTER or doctor.

See Section 12 for environmental precautions.

#### Product name SIGMACONDUCTIVE 70 HARDENER

# Section 2. Hazards identification

Classification of the substance or mixture       : FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (and) - Category 5 ACUTE TOXICITY (and) - Category 4 SkiN CORROSION/IRRITATION - Category 2 CACUTE TOXICITY (and taiton) - Category 2 SERIOUS EVE DAMAGE/EVEI (RRITATION - Category 1 CARCINOGENICITY - Category 2 AOUATTO HAZARD (ACUTE) - Category 3 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 59%         Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 59%       Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 59%         GHS label elements       :       :       :       :       :         Hazard pictograms       :       :       :       :       :       :         Signal word       :       :       Danger       :       :       :       :         Hazard statements       :			
Hazard pictograms:		<ul> <li>ACUTE TOXICITY (oral) - Category 5</li> <li>ACUTE TOXICITY (dermal) - Category 5</li> <li>ACUTE TOXICITY (inhalation) - Category 4</li> <li>SKIN CORROSION/IRRITATION - Category 2</li> <li>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1</li> <li>CARCINOGENICITY - Category 2</li> <li>AQUATIC HAZARD (ACUTE) - Category 3</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 59%</li> <li>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 acute inhalation toxicity: 59%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 59%</li> </ul>	
Hazard pictograms:	GHS label elements		
Hazard statements: Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Harmful to aquatic life.Precautionary statementsPrevention: 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. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. 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: Call a POISON CENTER or doctor if you feel unwell. 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.Suitable extinguishing media: Use dry chemical, CO2, water spray (fog) or foam.			
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Note: Suitable extinguishing mediaHave 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. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. 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 SWALLOWED: 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: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation occurs: Get medical 	Precautionary statements		
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Storage : Store locked up. Store in a well-ventilated place. Keep cool.		: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.	
	Storage	: Store locked up. Store in a well-ventilated place. Keep cool.	

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	Juentineation	
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Physical and chemical hazards	: Flammable liquid and vapor.	
Health hazards	May be harmful if swallowed or in contact with skin. Causes skin irritation. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.	
Symptoms related to the phy	sical, chemical and toxicological characteristics	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: No specific data.	
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 effect	ts and also chronic effects from short and long term exposure	
<u>Short term exposure</u>		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Long term exposure Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Environmental hazards	: Harmful to aquatic life.	
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.

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# Section 3. Composition/information on ingredients

Ingredient name	%	CAS number	
🕅 Iene isomers mixture	10 - <25	1330-20-7	
1-methoxy-2-propanol	1 - <10	107-98-2	
4-methylpentan-2-one	1 - <10	108-10-1	
2-methylpropan-1-ol	1 - <10	78-83-1	
ethylbenzene	1 - <10	100-41-4	
2-methoxypropanol	0.1 - <1	1589-47-5	

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 necessa	r <u>y first aid measures</u>
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 sympto	ms/effects, acute and delayed
Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	: May be harmful if swallowed.
Over-exposure signs/s	symptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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

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# Section 4. First aid measures

Indication of immediate med	lical attention and special treatment needed, if necessary
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# 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. 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
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, protectiv	re 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".

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#### Section 6. Accidental release measures

Environmental precautions	1	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.	

#### 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 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	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. 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.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name		Exposure limits
xylene isomers mixture		<b>GBZ 2.1 (China, 8/2019).</b> PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
1-methoxy-2-propanol		PC-TWA: 50 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 1/2021).</b> STEL: 369 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 184 mg/m <sup>3</sup> 8 hours.
4-methylpentan-2-one		TWA: 184 flight o hours. TWA: 50 ppm 8 hours. ACGIH TLV (United States, 1/2021). STEL: 75 ppm 15 minutes. TWA: 20 ppm 8 hours.
2-methylpropan-1-ol		ACGIH TLV (United States, 1/2021). TWA: 152 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene		<b>GBZ 2.1 (China, 8/2019).</b> PC-STEL: 150 mg/m <sup>3</sup> 15 minutes. PC-TWA: 100 mg/m <sup>3</sup> 8 hours.
Recommended monitoring procedures	atmosphere or biological mon of the ventilation or other com protective equipment. Reference standards. Reference to nat	dients with exposure limits, personal, workplace nitoring may be required to determine the effectiveness atrol measures and/or the necessity to use respiratory ence should be made to appropriate monitoring ional guidance documents for methods for the substances will also be required.
Appropriate engineering controls	ventilation or other engineerin contaminants below any reco	lation. Use process enclosures, local exhaust ng controls to keep worker exposure to airborne ommended or statutory limits. The engineering controls or dust concentrations below any lower explosive rentilation equipment.
Environmental exposure controls	: Emissions from ventilation or they comply with the requirer cases, fume scrubbers, filters	work process equipment should be checked to ensure nents of environmental protection legislation. In some s or engineering modifications to the process to reduce emissions to acceptable levels.
ndividual protection measu	res	
Hygiene measures	eating, smoking and using th Appropriate techniques shou	ace thoroughly after handling chemical products, before e lavatory and at the end of the working period. Id be used to remove potentially contaminated clothing. before reusing. Ensure that eyewash stations and he workstation location.
Eye protection <u>Skin protection</u>	: Chemical splash goggles and	d 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	: 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

<u>Appearance</u>	
Physical state	: Liquid.
Odor	: Characteristic.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 24.5°C (76.1°F)
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)
Relative density	: 0.98
Solubility	: Insoluble in the following materials: cold water.
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.

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# Section 10. Stability and reactivity

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
xylene isomers mixture	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
	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
	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
	LD50 Dermal	Rabbit	5660 mg/kg	-
	LD50 Oral	Rat	5.3 g/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

**Carcinogenicity** 

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

# Section 11. Toxicological information

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

#### Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely	: Not available.
routes of exposure	

#### Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	: May be harmful if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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

<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

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# Section 11. Toxicological information

Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
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.

#### 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)
GMACONDUCTIVE 70 HARDENER	3845.5	3911.2	N/A	20.1	2.6
xylene isomers mixture	4300	1700	N/A	11	1.5
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
4-methylpentan-2-one	2080	N/A	N/A	11	1.5
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
2-methoxypropanol	5300	5660	N/A	N/A	N/A

#### 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
-methylpentan-2-one	OECD 301F	83 % - Readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

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Product name SIGMACONDUCTIVE 70 HARDENER

# Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
✓Jene isomers mixture 4-methylpentan-2-one ethylbenzene		-	Readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
version and the second	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.

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

# Section 13. Disposal considerations

**Disposal methods** The generation of waste should be avoided or minimized wherever possible. 2 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

UN1263			
	UN1263	UN1263	UN1263
PAINT	PAINT	PAINT	PAINT
3	3	3	3
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3		3	3 3

China

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Section 14.	Transport inf	ormation		
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Additional information	ation			
CN	: None identified.			
UN	: 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.

Transport in bulk according : Not applicable. to IMO instruments

# Section 15. Regulatory information

China inventory (IECSC)	: All components are listed or exempted.
References	<ul> <li>Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)</li> </ul>

# Section 16. Other information

History	
Date of issue/Date of revision	: 13 April 2022
Date of previous issue	: 8/27/2021
Version	: 8.01
	EHS

Product name SIGMACONDUCTIVE 70 HARDENER

#### Section 16. Other information

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

**V** 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.