# **SAFETY DATA SHEET**

#### **SIGMAZINC 68 GP HARDENER**



Date of issue 25 July 2024

**Version 2** 

## 1. Product and company identification

Product name : SIGMAZINC 68 GP HARDENER

Product code : 00464077
Product type : Liquid.

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Not applicable.

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe

652-0803 Japan; Tel: +81-78-574-2777

**Emergency telephone** 

number

: 078 574 2777

### 2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 3

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 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -

Category 2

**GHS label elements** 

Hazard pictograms











Signal word : Danger

Japan Page: 1/15

**Product name SIGMAZINC 68 GP HARDENER** 

### 2. Hazards identification

#### **Hazard statements**

: Flammable liquid and vapor.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.

May damage fertility or the unborn child.

Causes damage to organs. (central nervous system (CNS), kidneys, liver,

respiratory organs)

Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, nervous system, respiratory organs)

Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

#### **Prevention**

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

#### Response

: Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

# Storage Disposal

- : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

# Other hazards which do not result in classification

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

# 3. Composition/information on ingredients

Substance/mixture : Mixture

#### **CAS** number/other identifiers

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

Ingredient name	%	CAS number	CSCL
<b>₽</b> poxy Amine Resin	20 - <25	SUB123903	Not available.
Ethyl Benzene	15 - <20	100-41-4	3-28; 3-60
Propylene glycol monomethyl ether	12.5 - <15	107-98-2	2-404; 7-97
Propylidynetrimethanol, propoxylated, reaction	10 - <12.5	39423-51-3	Not available.
products with ammonia			
Xylene	10 - <12.5	1330-20-7	3-3; 3-60
benzyl alcohol	7 - <10	100-51-6	3-1011
isobutyl alcohol	3 - <5	78-83-1	2-3049
m-Xylylenediamine	2 - <3	1477-55-0	3-2888; 3-308

Japan Page: 2/15

Product code 00464077 Date of issue 25 July 2024 Version 2
Product name SIGMAZINC 68 GP HARDENER

# 3. Composition/information on ingredients

L				
	2,4,6-Tris(dimethylaminomethyl)phenol	2 - <3	90-72-2	3-714; 3-762;
				3-776

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

### 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

**Inhalation**: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

**Skin contact**: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

**Ingestion**: If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

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

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May

cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes severe burns. Causes damage to organs following a single exposure in

contact with skin. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion**: Causes damage to organs following a single exposure if swallowed. Can cause

central nervous system (CNS) depression.

#### **Over-exposure signs/symptoms**

**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 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

Japan Page: 3/15

**Product name SIGMAZINC 68 GP HARDENER** 

### 4. First aid measures

skeletal malformations

**Ingestion**: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Specific hazards arising from the chemical

: 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 toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides

nitrogen oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

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

# 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Japan Page: 4/15

### 6. Accidental release measures

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

#### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with 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.

# 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: 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.

> Japan Page: 5/15

# 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits** 

Ingredient name	Exposure limits
Ethyl Benzene	Japan Society for Occupational Health (Japan, 5/2023). Absorbed through skin. OEL-M: 87 mg/m³ 8 hours. OEL-M: 20 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020).
Xylene	TWA: 20 ppm 8 hours.  Industrial Safety and Health Act (Japan, 6/2020). [xylene]  TWA: 50 ppm 8 hours.  Japan Society for Occupational Health (Japan, 5/2023).
benzyl alcohol	OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m³ 8 hours.  Japan Society for Occupational Health (Japan, 5/2023). Skin sensitizer.
isobutyl alcohol	OEL-C: 25 mg/m³ Japan Society for Occupational Health (Japan, 5/2023). OEL-M: 150 mg/m³ 8 hours. OEL-M: 50 ppm 8 hours. Industrial Safety and Health Act (Japan, 6/2020).
m-Xylylenediamine	TWA: 50 ppm 8 hours.  Japan Society for Occupational Health (Japan, 5/2023). Skin sensitizer.

# procedures

Recommended monitoring: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **Appropriate engineering** controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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

Japan Page: 6/15

**Product name SIGMAZINC 68 GP HARDENER** 

# 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** 

: nitrile neoprene

**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.

# 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Odor : Characteristic.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 26°C (78.8°F)

Relative density : 0.96

Solubility(ies)

MediaResultcold waterNot soluble

# 10. Stability and reactivity

Reactivity

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

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

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

**Conditions to avoid** 

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

Incompatible materials

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

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following

materials: carbon oxides nitrogen oxides

Japan Page: 7/15

# 10. Stability and reactivity

# 11. Toxicological information

### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<b>E</b> thyl Benzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
Propylene glycol monomethyl ether	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
•	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
Propylidynetrimethanol,	LD50 Dermal	Rabbit	0.4 g/kg	-
propoxylated, reaction products with ammonia				
'	LD50 Oral	Rat	0.22 g/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
,	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
isobutyl alcohol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
-	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
m-Xylylenediamine	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	LD50 Oral	Rat	930 mg/kg	-
2,4,6-Tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl) phenol				
	LD50 Oral	Rat	1200 mg/kg	-

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>X</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
m-Xylylenediamine	Skin - Severe irritant	Rat	-	mg 4 hours	4 hours

#### **Sensitization**

Product/ingredient name	Route of exposure	Species	Result
m-Xylylenediamine	skin	Mouse	Sensitizing

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

Japan Page: 8/15

**Product name SIGMAZINC 68 GP HARDENER** 

# 11. Toxicological information

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

Name	Category	Route of exposure	Target organs
Ethyl Benzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Propylene glycol monomethyl ether	Category 3	-	Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
benzyl alcohol	Category 1	-	central nervous system (CNS), kidneys
	Category 3		Narcotic effects
isobutyl alcohol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
m-Xylylenediamine	Category 1	-	respiratory organs

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

Name	Category	Route of exposure	Target organs
Ethyl Benzene	Category 1	-	hearing organs, nervous system
Xylene	Category 1	-	nervous system, respiratory organs
benzyl alcohol	Category 1	-	central nervous system (CNS)
m-Xylylenediamine	Category 1	-	respiratory organs

#### **Aspiration hazard**

Name	Result
<b>E</b> thyl Benzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

#### 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 severe burns. Causes damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause an allergic skin reaction.

Ingestion

: Causes damage to organs following a single exposure if swallowed. Can cause

central nervous system (CNS) depression.

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

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

Japan Page: 9/15

**Product name SIGMAZINC 68 GP HARDENER** 

### 11. Toxicological information

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness 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

**Short term exposure** 

Potential immediate

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

effects

: Not available.

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure. Prolonged or

repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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

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

**Numerical measures of toxicity** 

**Acute toxicity estimates** 

Japan Page: 10/15

Product code 00464077	Date of issue 25 July 2024	Version 2
Product name SIGMAZINC 68 GP HARDENER		

# 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMAZINC 68 GP HARDENER	2106.6	2863.7	N/A	17.1	11.1
Ethyl Benzene	3500	17800	N/A	17.8	N/A
Propylene glycol monomethyl ether	5200	13000	N/A	11	N/A
Propylidynetrimethanol, propoxylated, reaction products with ammonia	500	1100	N/A	N/A	N/A
Xylene	4300	1700	N/A	11	N/A
benzyl alcohol	1230	2000	N/A	N/A	N/A
isobutyl alcohol	2830	2460	N/A	11	N/A
m-Xylylenediamine	930	1100	N/A	N/A	0.5
2,4,6-Tris(dimethylaminomethyl)phenol	1200	1280	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.

# 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
<b>⊵</b> thyl Benzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
•	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Propylene glycol monomethyl ether	Acute LC50 23300 mg/l	Daphnia	48 hours
•	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
isobutyl alcohol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-Ťris	Acute LC50 >100 mg/l	Daphnia	48 hours
(dimethylaminomethyl)pheno	1	·	
` , , , , , , , , , , , , , , , , , , ,	Acute LC50 >100 mg/l	Fish	96 hours

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Ethyl Benzene 2,4,6-Tris (dimethylaminomethyl)phenol	- OECD 301D Ready Biodegradability - Closed Bottle Test		dily - 10 days eadily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
Ethyl Benzene Xylene benzyl alcohol 2,4,6-Tris (dimethylaminomethyl)phenol	- - -		- - -		Readily Readily Readily Not rea	/ /

#### **Bioaccumulative potential**

	Japan	Page: 11/15
--	-------	-------------

**Product name SIGMAZINC 68 GP HARDENER** 

### 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>E</b> thyl Benzene	3.6	79.43	Low
Propylene glycol	<1	-	Low
monomethyl ether			
Propylidynetrimethanol,	-1.13	-	Low
propoxylated, reaction			
products with ammonia			
Xylene	3.12	7.4 to 18.5	Low
benzyl alcohol	0.87	-	Low
isobutyl alcohol	1	-	Low
m-Xylylenediamine	0.18	2.69	Low
2,4,6-Tris	0.219	-	Low
(dimethylaminomethyl)phenol			

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

# 13. Disposal considerations

**Disposal methods** 

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and

# 14. Transport information

	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III	III	III
Environmental hazards	No.	No.	No.

Japan Page: 12/15

#### Product code 00464077 Date of issue 25 July 2024 Version 2 **Product name SIGMAZINC 68 GP HARDENER**

# 14. Transport information

Marine pollutant	Not applicable.	Not applicable.	Not applicable.
substances			

#### **Additional information**

UN : None identified. **IMDG** : None identified. **IATA** : 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

# 15. Regulatory information

#### **Fire Service Law**

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

#### Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
Ethylbenzene	19	Class 1	53
Xylene	11	Class 1	80

#### **Industrial Safety and Health Act**

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

Ingredient name	%		Reference number
ethyl benzene	≥10 - ≤20	Special Organic Solvents	3-3

#### Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Ethylbenzene Propylene glycol monomethyl ether Xylene Benzyl alcohol	≥10 - ≤20 ≥10 - ≤20 ≥10 - ≤20 ≤10	Listed Listed Listed Listed	70 496 136 530-2, 530-4 (2024-04)
Butanol m-Xylylenediamine	≤10 ≤10	Listed Listed	477 555

#### **Chemicals requiring notification**

	Japan	Page: 13/15
--	-------	-------------

Product code 00464077 Date of issue 25 July 2024 Version 2
Product name SIGMAZINC 68 GP HARDENER

# 15. Regulatory information

Ingredient name	%	Status	Reference number
Ethylbenzene Propylene glycol monomethyl ether Xylene Benzyl alcohol	≥10 - ≤20 ≥10 - ≤20 ≥10 - ≤20 ≤10	Listed Listed Listed Listed	70 496 136 530-2, 530-4 (2024-04)
Butanol m-Xylylenediamine	≤10 ≤10	Listed Listed	477 555

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

None of the components are listed.

#### **Mutagen**

None of the components are listed.

Corrosive liquid : Not listed

Occupational Safety and : Inflammable

Health Law

Regulations on the

: Not listed

**Prevention of Tetraalkyl** 

**Lead Poisoning** 

Harmful Substances

**Subject to Obtaining** 

Permission for Manufacturing

Harmful Substances

Harmful Substances,

Prohibited for Manufacturing : Not listed

: Inflammable

: Not listed

ISHL Enforcement Order

**Appendix 1 - Dangerous** 

Cubatanasa

**Substances** 

Lead regulation : Not listed
Organic solvents : Class 2

poisoning prevention

#### **Poisonous and Deleterious Substances**

None of the components are listed.

#### **Chemical Substances Control Law (CSCL)**

Ingredient name	%	Status	Reference number
<b>E</b> thylbenzene	≥10 - ≤20	Priority assessment	50
Xylene	≥10 - ≤20	Priority assessment	125
Toluene	≤10	Priority assessment	46

**High Pressure Gas Control**: Not available.

Law

#### **Explosives Control Law**

None of the components are listed.

Japan Page: 14/15

Product code 00464077 **Version 2** Date of issue 25 July 2024

**Product name SIGMAZINC 68 GP HARDENER** 

### 15. Regulatory information

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

#### **Maritime Safety Law**

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

None of the components are listed.

#### Container class

None of the components are listed.

**JSOH Carcinogen** : Group 2B **List of Specially Controlled** 

: Not listed

**Industrial Waste** 

Japan inventory

: All components are listed or exempted.

**Road law** : Not available.

### 16. Other information

#### **History**

Date of issue/Date of

revision

: 25 July 2024

**Date of previous issue** 

: 8/24/2023

**Version** Prepared by : 2

: EHS Key to abbreviations

: ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

bv Rail

**UN = United Nations** 

Indicates information that has changed from previously issued version.

#### **Notice to reader**

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

Japan Page: 15/15