SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to Hazardous Product Regulations 2015.

Date of issue/Date of revision 23 October 2023 Version 2.02

Section 1. Identification		
Product name	: SIGMAZINC 68 GP HARDENER	
Product code	: 000001191884	
Other means of identification	: 00463749; 00474754	
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	 PPG Architectural Coatings Canada, Inc. 1550, rue Ampère, bureau 500 Boucherville (Québec) J4B 7L4 Canada +1 450-655-3121 	
	PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272	
<u>Emergency telephone</u> <u>number</u>	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)	
Technical Phone Number	: 888-977-4762	

Section 2. Hazard identification

Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION - Category 1C
	SERIOUS EYE DAMAGE - Category 1
	SKIN SENSITIZATION - Category 1B
	CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	Health Hazards Not Otherwise Classified - Category 1
GHS label elements	

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Product code 000001191884 Product name SIGMAZINC 68 GP HARDENER

Section 2. Hazard identification

Hazard pictograms	:	
Signal word	: [Danger
Hazard statements	H C N S N C	Flammable liquid and vapor. Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. (hearing organs) Prolonged or repeated contact may dry skin and cause irritation.
Precautionary statements		
Prevention	h e a v	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. 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 bout of the workplace.
Response	F C ii F S C C	F exposed or concerned: Get medical advice or attention. IF INHALED: Remove berson 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 mmediately 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		Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal		Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	r V F ft F	Repeated exposure to high vapor concentrations may cause irritation of the espiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes neadaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic umes when heated. Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 23.7% (oral), 23.7% (dermal), 37.5% (inhalation)

Section 3. Composition/information on ingredients

Substance/mixture		Mixture
Product name	4	SIGMAZINC 68 GP HARDENER
Other means of identification	:	00463749; 00474754

CAS number/other identifiers

Product name SIGMAZINC 68 GP HARDENER

Section 3. Composition/information on ingredients

Ingredient name	Synonyms	% (w/w)	CAS number
Epoxy Amine Resin		10 - 30*	Not available.
xylene	Benzene, dimethyl-; Xylol; xylene, mixed isomers, pure; xylene, crude; Benzene, dimethyl-,; Xylene (mixed); Xylenes; Dimethylbenzene; XYLENES (Isomer Mixture); xylene (mixture), including m- xylene, o-xylene, p-xylene; XYLENE, mixture of isomers	10 - 30*	1330-20-7
1-methoxy-2-propanol	monopropylene glycol methyl ether; 1-methoxypropan-2-ol; 2-Propanol, 1-methoxy-; Propylene glycol monomethyl ether; Dowtherm 209; Propylene glycol methyl ether; 1-Methoxy- 2-hydroxypropane; 2-Methoxy- 1-methylethanol; PGME; mixture containing by weight: — 69 % or more but not more than 71 % of 1-methoxypropan- 2-ol (CAS RN 107-98-2), — 29 % or more but not more than 31 % of 2-methoxy- 1-methylethyl acetate (CAS RN 108-65-6); methoxyisopropanol	10 - 30*	107-98-2
Propylidynetrimethanol, propoxylated, reaction products with ammonia	Poly[oxy(methyl-1,2-ethanediyl)], .alpha hydroomega(2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl) -1,3-propanediol (3:1); Poly[oxy(methyl- 1,2-ethanediyl)], α -hydro- ω - (2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1); Trimethylolpropane, poly (oxypropylene)triamine; polyetheramineT403; Trimethylolpropane poly(oxypropylene) triamine; α -Hydro- ω - (2-aminomethylethoxy)poly[oxy(methyl- 1,2-ethanediyl)]ether-2-ethyl-2- (hydroxymethyl)-1,3-propanediol (1:3); Reaction product of propylidynetrimethanol, propylene oxide and ammonia; Polyoxypropylentriamin	7 - 13*	39423-51-3
benzyl alcohol	Benzenemethanol; .alpha Hydroxytoluene; Phenylcarbinol; Phenylmethanol; E 1519; α- hydroxytoluene; Phenylmethyl alcohol; toluenol, alpha-; (hydroxymethyl)benzene; BENZENECARBINOL; alpha- Hydroxytoluene	5 - 10*	100-51-6
o-xylene	Benzene, 1,2-dimethyl-; o-Xylol; ortho- Xylene; 1,2-Dimethylbenzene; O- DIMETHYLBENZENE; o-Xylenes; Xylene; 1,2-Xylene; xylene, o-isomer; o- Xylene; Mixture of 1,2-xylene and 1,3-xylene and	3 - 7*	95-47-6

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Section 3. Composition/information on ingredients

	-		
2-methylpropan-1-ol	iso-butanol; 1-Propanol, 2-methyl-; Isobutyl alcohol; Isobutanol; 2-Methyl- 1-propanol; Isopropylcarbinol; IBA; i-Butyl alcohol; catalyst consisting predominantly of dinonylnaphthalenedisulphonic acid in the form of a solution in isobutanol; isobutanol; iso-butanol; Isobutyl alcohol (I, T)	1 - 5*	78-83-1
ethylbenzene	Benzene, ethyl-; Phenylethane; Ethylbenzol; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); EB; Mono-(or di-) methyl (ethyl,bromoallyl, bromopropyloxycarbonyl orchloropropyloxycarbonyl) benzene	1 - 5*	100-41-4
m-phenylenebis(methylamine)	1,3-Benzenedimethanamine; m- Xylylendiamine; m-Xylene alpha, alpha'- diamine; m-Xylene α,α'-diamine; m-xylene-α,α'-diamine; m- Xylylenediamine; 1,3-bis(Aminomethyl) benzene; MXDA; m-Xylene α,α'-diamine; m-Xylene-a, a'diamine; Dimethylbenzene	1 - 5*	1477-55-0
2,4,6-tris(dimethylaminomethyl)phenol	Phenol, 2,4,6-tris[(dimethylamino)methyl]-; Phenol, 2,4,6-tris(dimethylaminomethyl)-; 2,4,6-tris((dimethylamino)methyl)phenol; Phenol, 2,4,6-tris{(dimethylamino)methyl]phenol; 2,4,6-Tris[(dimethylaminomethyl)phenol; 2,4,6-Tris(N,N-dimethylaminomethyl)phenol; 2,4,6-Tridimethylaminomethylphenol; 2,4,6-Tridimethylaminomethylphenol; TRIS (2,4,6-DIMETHYLAMINOMONOMETHYL) PHENOL; TRIS (2,4,6-DIMETHYLAMINOMETHYL) PHENOL; TRIS[(DIMETHYLAMINO) METHYL]PHENOL, 2,4,6-	1 - 5*	90-72-2

*Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

SUB codes represent substances without registered CAS Numbers.

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

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

Section 4. First-aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

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 effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
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 me	dical 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)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for
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.
Methods and materials for co	ont	ainment and cleaning up
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).
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".
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.

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Section 6. Accidental release measures

emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	L	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Special precautions	:	Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
Epoxy Amine Resin xylene	None. CA Alberta Provincial (Canada, 6/2018). [Dimethylbenzene (o,m & p isomers)] 15 min OEL: 651 mg/m ³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m ³ 8 hours.
	8 hrs OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada,

Product name SIGMAZINC 68 GP HARDENER

Section 8. Exposure controls/personal protection

	 6/2022). [Xylene (o, m & p isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). [Xylene (o-,m-,p- isomers)] STEV: 651 mg/m³ 15 minutes. STEV: 150 ppm 15 minutes. TWAEV: 434 mg/m³ 8 hours. TWAEV: 434 mg/m³ 8 hours. TWAEV: 100 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [Xylene (o-, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). [Xylene (o, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
1-methoxy-2-propanol	CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 553 mg/m ³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 369 mg/m ³ 8 hours. 8 hrs OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2022). STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). STEV: 553 mg/m ³ 15 minutes. STEV: 150 ppm 15 minutes. TWAEV: 369 mg/m ³ 8 hours. TWAEV: 369 mg/m ³ 8 hours. TWAEV: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Propylidynetrimethanol, propoxylated, reaction products with ammonia benzyl alcohol o-xylene	

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Section 8. Exposure controls/personal protection

	STEV: 150 ppm 15 minutes. TWAEV: 434 mg/m ³ 8 hours. TWAEV: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). [Xylene (o, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [Xylene (o-, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
2-methylpropan-1-ol	 CA Alberta Provincial (Canada, 6/2018). Skin sensitizer. 8 hrs OEL: 152 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2022). TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). TWAEV: 152 mg/m³ 8 hours. TWAEV: 50 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
ethylbenzene	 CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours. 8 hrs OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2022). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). TWAEV: 20 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
m-phenylenebis(methylamine)	CA Alberta Provincial (Canada, 6/2018). Absorbed through skin. C: 0.1 mg/m ³ 15 minutes. CA British Columbia Provincial (Canada, 6/2022). Absorbed through skin. C: 0.1 mg/m ³ 15 minutes. CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. Ceiling Limit: 0.1 mg/m ³ CA Quebec Provincial (Canada, 6/2022). Canada Page: 9/18

Section 8. Exposure controls/personal protection

	Absorbed through skin.
	STEV: 0.1 mg/m ³ 15 minutes.
	CA Saskatchewan Provincial (Canada,
	7/2013). Absorbed through skin.
	CEIL: 0.1 mg/m ³
2,4,6-tris(dimethylaminomethyl)phenol	None.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures		Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measure	<u>es</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	÷	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	: nitrile neoprene

Gloves: nitrile neopreneBody 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.

Section 8. Exposure controls/personal protection

	Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
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Section 9. Physical and chemical properties

<u>Appearance</u>			
Physical state	1	Liquid.	
Color	÷	oloui.	
Odor	4	Amine-like. [Strong]	
Odor threshold	1	Not available.	
рН	÷	Not applicable.	
Melting point	÷	Not available.	
Boiling point	÷	>37.78°C (>100°F)	
Flash point	4	Closed cup: 33°C (91.4°F)	
Auto-ignition temperature	1	Not available.	
Decomposition temperature	1	Not available.	
Flammability	1	Not available.	
Lower and upper explosive (flammable) limits	:	Not available.	
Evaporation rate	:	Not available.	
Vapor pressure	:	Not available.	
Vapor density	1	Not available.	
Relative density	:	0.96	
Density(lbs / gal)	1	8.01	
Solubility(ies)		Media	Result
Solubility(les)	ľ	cold water	Not soluble
Partition coefficient: n- octanol/water	:	Not applicable.	
Viscosity	:	Kinematic (40°C (104°F)): >	▶21 mm²/s (>21 cSt)
Volatility	:	64% (v/v), 60.565% (w/w)	
% Solid. (w/w)	:	39.435	

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.
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Section 10. Stability and reactivity

Refer to protective measures listed in sections 7 and 8.

Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
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	-
Propylidynetrimethanol,	LD50 Dermal	Rabbit	0.4 g/kg	-
propoxylated, reaction				
products with ammonia				
	LD50 Oral	Rat	0.22 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
o-xylene	LC50 Inhalation Vapor	Rat	27124 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	12126 mg/kg	-
	LD50 Oral	Rat	3523 mg/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	-
m-phenylenebis	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
(methylamine)				
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	LD50 Oral	Rat	930 mg/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl) phenol				
`	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
m-phenylenebis (methylamine)	Skin - Severe irritant	Rat	-	4 hours	4 hours
2,4,6-tris (dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

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Section 11. Toxicological information

<u>Conclusion/Summary</u>						
Skin	: There are n	o data available on the r	mixture itself.			
Eyes	: There are n	o data available on the r	mixture itself.			
Respiratory	: There are n	: There are no data available on the mixture itself.				
Sensitization						
Product/ingredient name	Route of exposure	Species	Result			
m-phenylenebis (methylamine)	skin	Mouse	Sensitizing			
Skin	: There are n	o data available on the r	mixture itself.			
Respiratory	: There are n	o data available on the r	mixture itself.			

Respiratory Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary	: There are no data available on the mixture itself.
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Classification

Product/ingredient name	OSHA	IARC	NTP
xylene	-	3	
o-xylene	-	3	
ethylbenzene	-	2B	

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Product name SIGMAZINC 68 GP HARDENER

Section 11. Toxicological information

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

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

Aspiration hazard

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

Information on the likely routes of exposure

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.

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
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

Conclusion/Summary	: There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of
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Section 11. Toxicological information

	exposure and eye contact.
<u>Short 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.
Long term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health eff	ects
General	 May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.
Number of the second	

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)
SIGMAZINC 68 GP HARDENER	1695.9	2033.9	95986.4	23.7	2.7
xylene	4300	1700	N/A	11	1.5
1-methoxy-2-propanol	5200	13000	N/A	N/A	N/A
Propylidynetrimethanol, propoxylated, reaction products with ammonia	500	1100	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5
o-xylene	3523	1100	N/A	11	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
m-phenylenebis(methylamine)	930	2500	4500	N/A	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
5 1 1	Acute LC50 >4500 mg/l Fresh water	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	-
2,4,6-tris (dimethylaminomethyl)phenc	Acute LC50 175 mg/l	Fish	96 hours

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Section 12. Ecological information

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
o-xylene ethylbenzene	OECD 301F -	94 % - Readily - 28 79 % - Readily - 10		-	-
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
xylene benzyl alcohol o-xylene ethylbenzene	- - -		- - -		Readily Readily Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
1-methoxy-2-propanol	<1	-	Low
Propylidynetrimethanol, propoxylated, reaction products with ammonia	-1.13	-	Low
benzyl alcohol	0.87	-	Low
o-xylene	3.12	14.13	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
m-phenylenebis (methylamine)	0.18	2.69	Low
2,4,6-tris (dimethylaminomethyl)pheno	0.219 I	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

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

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 13. Disposal considerations

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

Section 14. Transport information

	TDG	IMDG	ΙΑΤΑ
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.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

TDG	: 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

Proof of classification
statement: Product classified as per the following sections of the Transportation of Dangerous
Goods Regulations: 2.18-2.19 (Class 3), 2.40-2.42 (Class 8).

Section 15. Regulatory information

National Inventory List

Canada inventory (DSL)

: At least one component is not listed.

Section 16. Other information

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

Health : 3 * Flammability : 3 Physical hazards : 0 (*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

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

Section 16. Other information

National Fire Protection Asso	ciation (U.S.A.)	
Health : 3 Flammab	pility : 3 Instability : 0	
Date of issue/Date of revision	23 October 2023	
Organization that prepared the SDS	: EHS	
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations 	
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Indicates information that has changed from previously issued version.

Disclaimer

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