# SAFETY DATA SHEET



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

Date of issue/Date of revision 25 June 2024

Version 7.01

### **Section 1. Identification**

Product name : SIGMALINE 2500 HARDENER

Product code : 00195815

Other means of : Not available.

identification

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.; Hardener.

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 : (412) 434-4515 (U.S.)

**Emergency telephone** 

<u>number</u>

(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

: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION - Category 2

Health Hazards Not Otherwise Classified - Category 1

**GHS label elements** 

Hazard pictograms :







Canada Page: 1/14

### **Product name SIGMALINE 2500 HARDENER**

### Section 2. Hazard identification

Signal word

: Danger

**Hazard statements** 

: Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Causes digestive tract burns.

#### **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. Use only outdoors or in a well-ventilated area. Avoid breathing 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

: IF exposed or concerned: Get medical advice or attention. 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.

Supplemental label elements

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

: Do not taste or swallow. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. 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. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Wash thoroughly after handling. Emits toxic fumes when heated.

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 61.3% (dermal), 66.7% (inhalation)

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

**Product name** 

SIGMALINE 2500 HARDENER

Other means of identification

: Not available.

**CAS** number/other identifiers

Canada Page: 2/14

# Section 3. Composition/information on ingredients

Ingredient name	Synonyms	% (w/w)	CAS number
prcyclo[2.2.1]heptanebis(methylamine)	Bicyclo[2.2.1]heptanedimethanamine; Mixture of 2,5-bis(aminomethyl)bicyclo [2.2.1]heptane and 2,6-bis(aminomethyl) bicyclo[2.2.1]heptane; Bicyclo[2.2.1] heptanediyldimethanamine; 2,5(2,6)-Bis (aminomethyl)bicyclo[2.2.1]heptane; Bicyclo[2.2.1]heptane- 2,3-diyldimethanamine; Modified cycloaliphatic polyamine	30 - 60*	56602-77-8
benzyl alcohol	Benzenemethanol; .alpha Hydroxytoluene; Phenylcarbinol; Phenylmethanol; E 1519; α- hydroxytoluene; Phenylmethyl alcohol; toluenol, alpha-; (hydroxymethyl)benzene; BENZENECARBINOL; alpha- Hydroxytoluene	15 - 40	100-51-6
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	Formaldehyde, polymer with N1,N1-dimethyl-1,3-propanediamine and phenol; Formaldehyde polymer with N,N-dimethyl-1,3-propanediamine and phenol	1 - 5*	445498-00-0
salicylic acid	Benzoic acid, 2-hydroxy-; 2-hydroxybenzoic acid; 2-Carboxyphenol; 2-Hydroxybenzenecarboxylic acid; HYDROXYBENZOIC ACID, O-; Salicylic acid (8CA); o-Hydroxybenzoic acid; Hydroxybenzoic acid; ORTHOHYDROXY BENZOIC ACID; SALICYCLIC ACID	1 - 5*	69-72-7
N-(3-(trimethoxysilyl)propyl) ethylenediamine	1,2-Ethanediamine, N1-[3-(trimethoxysilyl) propyl]-; 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-; [3-[(2-Aminoethyl) amino; 1,2-Ethanediamine, N-(3-(trimethoxysilyl)propyl)-; 3-(2-aminoethylamino) propyltrimethoxysilane; 2-aminoethyl (3-trimethoxysilylpropyl)amine; Ethylenediamine, N-(3-(trimethoxysilyl)propyl)-; (trimethoxysilylpropyl) ethylenediamine; 1,2-Ethanediamine, N-{3-(trimethoxysilyl)propyl}-; 3-(2-Aminoethylamino) propyltrimethoxysilane; Dehydrochlorination reaction products of 3-[(2-aminoethyl)amino] propyltrimethoxysilane and 3-chloropropyltrimethoxysilane; N1-[3-(Trimethoxysilyl)prop-1-yl]ethane-1,2-diamine	1 - 5*	1760-24-3
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}-;		90-72-2

Canada Page: 3/14

**Product name SIGMALINE 2500 HARDENER** 

# Section 3. Composition/information on ingredients

2,4,6-Tris[(dimethylamino)methyl]phenol; 2,4,6-Tri(dimethylaminomethyl)phenol; 2,4,6-Tris(N,N-dimethylaminomethyl)

phenol;

2,4,6-Tridimethylaminomethylphenol;

TRIS

(2,4,6-DIMETHYLAMINOMONOMETHYL)

PHENOL: TRIS

(2,4,6-DIMETHYLAMINOMETHYL) PHENOL; TRIS[(DIMETHYLAMINO)

METHYL]PHENOL, 2,4,6-

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 effects

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

Inhalation : Harmful if inhaled.

**Skin contact**: Causes severe burns. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

### Over-exposure signs/symptoms

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

pain watering redness

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

reduced fetal weight increase in fetal deaths skeletal malformations

Canada Page: 4/14

<sup>\*</sup>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.

### **Product name SIGMALINE 2500 HARDENER**

### Section 4. First-aid measures

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

pain or irritation redness

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

#### 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)

# Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: In a fire or if heated, a pressure increase will occur and the container may burst.

 Decomposition products may include the following materials: carbon oxides

nitrogen oxides metal oxide/oxides Formaldehyde.

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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.

Page: 5/14

Canada

Version 7.01 Product code 00195815 Date of issue 25 June 2024

**Product name SIGMALINE 2500 HARDENER** 

### Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

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

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

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** 

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

# Section 7. Handling and storage

#### Precautions for safe handling

**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. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 Wash hands thoroughly after handling.

Canada Page: 6/14

Date of issue 25 June 2024 Version 7.01

### Product code 00195815

**Product name SIGMALINE 2500 HARDENER** 

# Section 7. Handling and storage

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 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. 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**

### Occupational exposure limits

Ingredient name	Exposure limits
vicyclo[2.2.1]heptanebis(methylamine)	None.
benzyl alcohol	IPEL (-).
	TWA: 5 ppm
	STEL: 10 ppm
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	None.
salicylic acid	None.
N-(3-(trimethoxysilyl)propyl)ethylenediamine	None.
2,4,6-tris(dimethylaminomethyl)phenol	None.

#### Consult local authorities for acceptable exposure limits.

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.

**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/face protection **Skin protection** 

: Chemical splash goggles and face shield.

Canada

Page: 7/14

### **Product name SIGMALINE 2500 HARDENER**

# Section 8. Exposure controls/personal protection

Hand protection : Cher

: 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 : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist

before handling this product.

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.

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.
Color : Various

Odor : Amine-like. [Strong]

Odor threshold : Not available.

PH : Not applicable.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 118°C (244.4°F)

Auto-ignition temperature : 430°C (806°F)

Decomposition temperature : Not available.

Flammability : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.03 Density (lbs / gal) : 8.6

Solubility(ies) : Media Result

cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

**Viscosity** : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

**Volatility** : 58% (v/v), 56.256% (w/w)

Canada Page: 8/14

**Product name SIGMALINE 2500 HARDENER** 

### Section 9. Physical and chemical properties

% Solid. (w/w) : 43.744

# 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.

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 Formaldehyde. metal oxide/oxides

# Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
vicyclo[2.2.1]heptanebis	LD50 Oral	Rat	961 to 1400 mg/	-
(methylamine)			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	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	2413 mg/kg	-
2,4,6-tris (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

**Conclusion/Summary** 

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Sensitization** 

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Mutagenicity** 

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

Canada Page: 9/14

### **Product name SIGMALINE 2500 HARDENER**

# **Section 11. Toxicological information**

Carcinogenicity

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

**Reproductive toxicity** 

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

**Teratogenicity** 

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

### Specific target organ toxicity (single exposure)

Name	3 3 3	Route of exposure	Target organs
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Category 3		Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: blood, liver, heart,

brain.

Contains material which may cause damage to the following organs: kidneys, gastrointestinal tract, upper respiratory tract, skin, eyes, central nervous system

(CNS).

#### **Aspiration hazard**

Not available.

#### Information on the likely routes of exposure

#### Potential acute health effects

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

Inhalation : Harmful if inhaled.

**Skin contact**: Causes severe burns. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

#### Over-exposure signs/symptoms

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

pain watering redness

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

reduced fetal weight increase in fetal deaths skeletal malformations

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

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Canada Page: 10/14

**Product name SIGMALINE 2500 HARDENER** 

# Section 11. Toxicological information

Ingestion

 Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** 

: There are no data available on the mixture itself. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

Short term exposure

**Potential immediate** 

effects

: There are no data available on the mixture itself.

**Potential delayed effects** 

: There are no data available on the mixture itself.

Long term exposure

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 effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

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

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

**Reproductive toxicity**: Suspected of damaging fertility or the unborn child.

**Numerical measures of toxicity** 

**Acute toxicity estimates** 

Canada Page: 11/14

### **Product name SIGMALINE 2500 HARDENER**

# Section 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)
SIGMALINE 2500 HARDENER	675.2	2038.5	N/A	N/A	1.5
bicyclo[2.2.1]heptanebis(methylamine)	500	N/A	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5
Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol	500	N/A	N/A	N/A	N/A
salicylic acid	891	N/A	N/A	N/A	N/A
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	2500	N/A	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
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - <i>Daphnia longispina</i> - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
N-(3-(trimethoxysilyl)propyl) ethylenediamine	EC50 597 mg/l	Fish	96 hours
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
,	Acute LC50 >100 mg/l	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
7,4,6-tris (dimethylaminomethyl)phenol	OECD 301D Ready Biodegradability - Closed Bottle Test	4 % - Not readily - 2	8 days	-	-
Product/ingredient name	Aquatic half-life		Photolysis	5	Biodegradability
penzyl alcohol 2,4,6-tris (dimethylaminomethyl)phenol	-		-		Readily Not readily

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
penzyl alcohol salicylic acid 2,4,6-tris (dimethylaminomethyl)phenol	0.87 2.21 to 2.26 0.219	-	Low Low

### **Mobility in soil**

Canada	Page: 12/14
--------	-------------

**Product name SIGMALINE 2500 HARDENER** 

# Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

# Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. 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.

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

# **Section 14. Transport information**

	TDG	IMDG	IATA
UN number	UN3066	UN3066	UN3066
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	8	8	8
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	(Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol)	(Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol)	Not applicable.

#### **Additional information**

: The marine pollutant mark is not required when transported by road or rail. **TDG** 

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

: The environmentally hazardous substance mark may appear if required by other transportation IATA

regulations.

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.

Canada Page: 13/14

**Product name SIGMALINE 2500 HARDENER** 

### Section 14. Transport information

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: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).

# 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.)

Flammability: 1 Physical hazards: Health:

(\*) - 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.

**National Fire Protection Association (U.S.A.)** 

Health: Flammability: 1 Instability: 0

Date of issue/Date of 25 June 2024

revision

Organization that prepared : EHS

the SDS

**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 = Intermediate Bulk Container

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)

N/A = Not available SGG = Segregation Group UN = United Nations

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.

> Canada Page: 14/14