## SAFETY DATA SHEET

The information in this Safety Data Sheet is required pursuant to GHS UN rev. 7



Date of issue/Date of revision 3 October 2024

Version 4.01

## Section 1. Identification

Product code : 00345230

Product name : SIGMASHIELD 880 BASE REDBROWN

Product type : Liquid.

Other means of identification

Not available.

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

Product use : Coating.

Professional applications, Used by spraying.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

Company/undertaking

identification

: PPG Industries Sales, Inc. and PPG Coatings (Philippines), Inc.

3rd Floor First Life Center 174 Salcedo St., Legaspi Village Makati City 1229, Philippines

Tel # 00632- 752-6773/ Fax # 00632-752-6771

**Emergency telephone** 

number

: CHEMTREC +(63) 2-395-3308 (CCN 17704)

## Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 5 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SKIN SENSITIZATION - Category 1

GERM CELL MUTAGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal

toxicity: 39.4%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 52%

**GHS label elements** 

Hazard pictograms







Signal word : Warning

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 2. Hazards identification

**Hazard statements** 

: Flammable liquid and vapor.

May be harmful in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
Suspected of causing genetic defects.

Harmful to aquatic life with long lasting effects.

#### **Precautionary statements**

**Prevention** 

: Øbtain, read and follow all safety instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing 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. Avoid breathing vapor. Wash hands thoroughly after handling. Do not touch eyes. Contaminated work clothing should not be allowed out of the workplace.

Response

exposed or concerned, get medical advice. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water. IF ON SKIN: Get medical help. Wash with plenty of water. If skin irritation or rash occurs: Get medical help. If skin irritation occurs: Get medical help. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help. Get medical help if you feel unwell.

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.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

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

**CAS number** : Not applicable.

Ingredient name	%	CAS number
bis-[4-(2,3-epoxipropoxi)phenyl]propane	20 - <25	1675-54-3
barium sulfate	10 - <20	7727-43-7
Talc , not containing asbestiform fibres	10 - <20	14807-96-6
xylene	5 - <10	1330-20-7
Epoxy Resin (700 <mw<=1100)< td=""><td>3 - &lt;5</td><td>25036-25-3</td></mw<=1100)<>	3 - <5	25036-25-3
Phenol, methylstyrenated	3 - <5	68512-30-1
2-methylpropan-1-ol	1 - <3	78-83-1
2,3-epoxypropyl neodecanoate	1 - <3	26761-45-5
12-hydroxyoctadecanoic acid, reaction products with	1 - <3	220926-97-6
1,3-benzenedimethanamine and hexamethylenediamine		

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.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

#### Section 4. First aid measures

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

**Eye contact**: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

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 irritation.

Inhalation : May cause respiratory irritation.

**Skin contact**: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

May cause an allergic skin reaction.

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

#### Over-exposure signs/symptoms

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

pain or irritation watering redness

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

respiratory tract irritation

coughing

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

irritation redness dryness cracking

**Ingestion**: No specific data.

#### 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 dry chemical, CO2, water spray (fog) or foam.

: Do not use water jet.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 5. Fire-fighting measures

Specific hazards arising from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life 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

nitrogen oxides sulfur oxides metal oxide/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

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. Avoid breathing 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). Water polluting material. May be harmful to the environment if released in large quantities.

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

**Small spill** 

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

Large spill

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

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Product name SIGMASHIELD 880 BASE REDBROWN

## 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. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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.

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.

including any incompatibilities

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.

## Section 8. Exposure controls/personal protection

#### Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
parium sulfate	ACGIH TLV (United States, 7/2023) TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
Talc , not containing asbestiform fibres	TLV (Philippines, 4/2016) TLV 8 hours: 20 mppcf. Form: Dust.
crystalline silica, respirable powder (>10 microns)	<b>TLV (Philippines, 4/2016)</b> TLV 8 hours: 10. / (%SiO <sub>2</sub> +2) mg/m³. Form:
diiron trioxide	Respirable dust.  TLV (Philippines, 4/2016) [Iron oxide]
xylene	TLV 8 hours: 10 mg/m³. Form: Fume. <b>TLV (Philippines, 4/2016) [Xylene]</b>
2-methylpropan-1-ol	TLV 8 hours: 0.1 mg/m³. <b>TLV (Philippines, 4/2016)</b> TLV 8 hours: 300 mg/m³.
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	TLV 8 hours: 100 ppm.  ACGIH TLV (United States)  TWA: 10 mg/m³. Form: Inhalable particle.  TWA: 3 mg/m³ (inhalable dust). Form:  Respirable particle.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 8. Exposure controls/personal protection

# 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 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**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

# 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 Body protection

: butyl rubber

# : 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**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance** 

**Physical state** : Liquid. Color : Brownish-red. Odor : Aromatic. [Slight] **Odor threshold** 

**Boiling point or initial** boiling point and boiling

**Melting point/freezing point** 

range

**Flammability** : Not available. Lower and upper explosive

(flammable) limits

Flash point

: Not available. : Not available. : >37.78°C (>100°F)

: Not available.

: Closed cup: 37°C (98.6°F)

**Auto-ignition temperature** 

Ingredient name °C °F Method 276 2,3-epoxypropyl neodecanoate 528.8

**Decomposition temperature** 

pН

: Not available.

: Not applicable.

**Viscosity** 

: Dynamic (room temperature): Not available. Kinematic (room temperature): >400 mm<sup>2</sup>/s

Kinematic (40°C): >21 mm<sup>2</sup>/s

**Viscosity** 

: > 100 s (ISO 6mm)

Solubility(ies)

Media Result cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

Vapor pressure

	Vapo	r Pressu	re at 20°C	Vapo	r pressu	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			

1.71 **Relative density** 

: Not available. Relative vapor density

**Particle characteristics** 

: Not applicable. Median particle size : Not available. **Evaporation rate** 

## Section 10. Stability and reactivity

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

**Chemical stability** : The product is stable.

Possibility of hazardous

reactions

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

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 10. Stability and reactivity

**Conditions to avoid** 

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

**Incompatible materials** 

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

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

**Hazardous polymerization** 

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

## **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
is-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	_
Epoxy Resin (700 <mw <="1100)&lt;/td"><td>LD50 Dermal</td><td>Rat</td><td>&gt;2000 mg/kg</td><td>-</td></mw>	LD50 Dermal	Rat	>2000 mg/kg	-
,	LD50 Oral	Rat	>2000 mg/kg	_
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	_
	LD50 Oral	Rat	>2000 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	_
2,3-epoxypropyl neodecanoate	LD50 Dermal	Rat	3800 mg/kg	-
	LD50 Oral	Rat	9.6 g/kg	-
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	LC50 Inhalation Dusts and mists	Rat	3.56 mg/l	4 hours
<u>-</u>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

# Conclusion/Summary <a href="Irritation/Corrosion">Irritation/Corrosion</a>

Product/ingredient name

: There are no data available on the mixture itself.

s-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-

**Species** 

Rabbit

**Score** 

**Exposure** 

24 hours 500

mg

**Observation** 

#### **Conclusion/Summary**

xylene

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

Skin - Moderate irritant

Result

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## **Section 11. Toxicological information**

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

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

**Sensitization** 

3	Route of exposure	Species	Result
s-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing

**Conclusion/Summary** 

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.

**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	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
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	3 3 3	Route of exposure	Target organs
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Category 2	inhalation	lungs

#### **Aspiration hazard**

Name	Result
xylene	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.Inhalation : May cause respiratory irritation.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## **Section 11. Toxicological information**

Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

May cause an allergic skin reaction.

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

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

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

pain or irritation watering redness

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

respiratory tract irritation

coughing

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

irritation redness dryness cracking

**Ingestion**: No specific data.

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

**Short term exposure** 

**Potential immediate** 

: Not available.

**Potential delayed effects** 

: Not available.

**Long term exposure** 

**Potential immediate** 

effects

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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

**Mutagenicity**: Suspected of causing genetic defects.

**Reproductive toxicity**: No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Route	ATE value
<b>Ø</b> ral	16734.18 mg/kg
Dermal	4010.06 mg/kg
Inhalation (vapors)	43.05 mg/l
Inhalation (dusts and mists)	5.33 mg/l

#### Other information :

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## **Section 11. Toxicological information**

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	<b>Exposure</b>
s-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,3-epoxypropyl neodecanoate	Acute EC50 3.5 mg/l	Algae	96 hours
	Acute EC50 4.8 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 9.6 mg/l	Fish - Oncorhynchus mykiss	96 hours
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata (microalgae)	72 hours
	Acute EC50 >100 mg/l	Daphnia - Daphnia magna (Water flea)	48 hours
	Acute LC50 >100 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
	Chronic NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC ≥50 mg/l	Daphnia - Daphnia magna (Water flea)	21 days

#### Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
√2-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine  √2-hydroxyoctadecanoic  acid, reaction products with 1,3-benzenedimethanamine  √3-hydroxyoctadecanoic  acid, reaction products with 1,3-benzenedimethanamine  √4-hydroxyoctadecanoic  acid, reaction products with 1,3-benzenedimethanamine  √4-hydroxyoctadecanoic  acid, reaction products with 1,3-benzenedimethanamine  √4-hydroxyoctadecanoic  acid, reaction products with 1,3-benzenedimethanamine  and hexamethylenediamine  acid, reaction products with 1,3-benzenedimethanamine  and hexamethylenediamine  and hexamethylenediamine  acid, reaction products  acid, rea	OECD 301D Ready Biodegradability - Closed Bottle Test		eadily - 29 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	ıradability
pris-[4-(2,3-epoxipropoxi) phenyl]propane xylene 2,3-epoxypropyl neodecanoate	-		-		Not rea	, /

#### **Bioaccumulative potential**

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#### **Product name SIGMASHIELD 880 BASE REDBROWN**

## Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
Phenol, methylstyrenated	3.627	-	Low
2-methylpropan-1-ol	1	-	Low
2,3-epoxypropyl neodecanoate	4.4	-	High
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	>6	-	High

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** 

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

## **Section 14. Transport information**

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

#### **Additional information**

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## Section 14. Transport information

UN : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to

2.3.2.5.1.

: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to **IMDG** 

2.3.2.5.

**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

## Section 15. Regulatory information

#### International regulations

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### Section 16. Other information

#### **History**

Date of issue/Date of

revision

: 3 October 2024

Date of previous issue : 11/15/2022

**Version** 4.01 Prepared by : EHS

ey 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)

UN = United Nations

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (dermal) - Category 5	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
AQUATIC HAZARD (ACUTE) - Category 3	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method

▼ Indicates information that has changed from previously issued version.

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**Product name SIGMASHIELD 880 BASE REDBROWN** 

## **Section 16. Other information**

#### **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 us, 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.

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