# **SAFETY DATA SHEET**



Date of issue/Date of revision 14 October 2024 Version 6.01

Section 1. Identification		
Product code	: 00393268	
Product name	: SIGMA SAILADVANCE DX BROWN	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
Product use	: Antifouling products Professional applications, Used by spraying.	
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737	
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)	

# Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1</li> </ul>

**GHS label elements, including precautionary statements** 

Hazard pictograms



Product code 00393268

Product name SIGMA SAILADVANCE DX BROWN

# Section 2. Hazards identification

Hazard statements	: Highly flammable liquid and vapor.
	Harmful if swallowed or if inhaled.
	Causes skin irritation.
	May cause an allergic skin reaction.
	Causes serious eye damage.
	May cause respiratory irritation.
	Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: ₩ear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.
Response	: Collect spillage. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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. Immediately call a POISON CENTER or doctor.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Not applicable.

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

result in classification

# Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
-------------------	---	---------

### CAS number/other identifiers

CAS number EC number	<ul><li>Not applicable.</li><li>Mixture.</li></ul>		
Ingredient name		%	CAS number
dicopper oxide		25 - <50	1317-39-1
xylene		10 - <20	1330-20-7
ethylbenzene		5 - <10	100-41-4
Talc, not containing asbes	stiform fibres	5 - <10	14807-96-6
zinc oxide		3 - <5	1314-13-2
rosin		1 - <3	8050-09-7
bis(1-hydroxy-1H-pyridine-	2-thionato-O,S)copper	1 - <3	14915-37-8
copper oxide		1 - <3	1317-38-0
tetraethyl silicate		1 - <3	78-10-4
4,5-dichloro-2-octyl-2H-iso	thiazol-3-one	0.3 - <1	64359-81-5
N,N'-ethane-1,2-diylbis(12-	-hydroxyoctadecan-1-amide)	0.1 - <0.3	123-26-2

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.

Singapore	English (US)	Page: 2/15
Suboro	<b>_</b> g( <b></b> )	

### Section 4. First aid measures

### Description of necessary first aid measures

Eye contact	<ul> <li>Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.</li> </ul>
Inhalation	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

Most important symptoms/e	ffee	cts, acute and delayed
Potential acute health effect	<u>:ts</u>	
Eye contact	:	Causes serious eye damage.
Inhalation	:	Harmful if inhaled. May cause respiratory irritation.
Skin contact	:	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	Harmful if swallowed.
<u>Over-exposure signs/symp</u>	ton	<u>15</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 med	lica	l 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	1	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)

Singapore	English (US)	Page: 3/15
-----------	--------------	------------

## Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly 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 very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

# Section 6. Accidental release measures

Personal precautions, protecti	ve equipment and emergency procedures
For non-emergency personnel	<ul> <li>No action shall be taken involving any personal risk or without suitable training.</li> <li>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources.</li> <li>No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.</li> <li>Put on appropriate personal protective equipment.</li> </ul>
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Product name SIGMA SAILADVANCE DX BROWN

# Section 6. Accidental release measures

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.

# 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

ngredient name	Exposure limits
ficopper oxide	Workplace Safety and Health Act (Singapore, 2/2006) [Copper (fume)] PEL (long term) 8 hours: 0.2 mg/m <sup>3</sup> . Form
	Fume.
kylene	Workplace Safety and Health Act
	(Singapore, 2/2006) [Xylene]
	PEL (long term) 8 hours: 100 ppm.
	PEL (long term) 8 hours: 434 mg/m <sup>3</sup> .
	PEL (short term) 15 minutes: 651 mg/m <sup>3</sup> .
	PEL (short term) 15 minutes: 150 ppm.
ethylbenzene	Workplace Safety and Health Act
	(Singapore, 2/2006) PEL (long term) 8 hours: 100 ppm.
	PEL (long term) 8 hours: 434 mg/m <sup>3</sup> .
	PEL (short term) 15 minutes: 543 mg/m <sup>3</sup> .
	PEL (short term) 15 minutes: 125 ppm.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act
	(Singapore, 2/2006)
	PEL (long term) 8 hours: 2 mg/m <sup>3</sup> .
zinc oxide	Workplace Safety and Health Act
	(Singapore, 2/2006)
	PEL (long term) 8 hours: 5 mg/m <sup>3</sup> . Form:
	Fume.
	PEL (long term) 8 hours: 10 mg/m <sup>3</sup> . Form Dust.
	PEL (short term) 15 minutes: 10 mg/m <sup>3</sup> .
	Form: Fume.
osin	ACGIH TLV (United States, 7/2023) [resir
	acids] Skin sensitizer , Inhalation sensitize
	TWA 8 hours: 0.001 mg/m <sup>3</sup> (as total Resir
	acids). Form: Inhalable fraction.
copper oxide	Workplace Safety and Health Act
	(Singapore, 2/2006) [Copper (fume)]
	PEL (long term) 8 hours: 0.2 mg/m <sup>3</sup> . Form
	Fume.
etraethyl silicate	Workplace Safety and Health Act
	(Singapore, 2/2006)
	PEL (long term) 8 hours: 10 ppm.
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	PEL (long term) 8 hours: 85 mg/m <sup>3</sup> . ACGIH TLV (United States)
$\mathbf{v}_{1}$	TWA: 10 mg/m <sup>3</sup> . Form: Total dust.
	TWA: 3 mg/m <sup>3</sup> . Form: Respirable.

English (US)	Page: 6/15
	English (US)

Product name SIGMA SAILADVANCE DX BROWN

# Section 8. Exposure controls/personal protection

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	s	
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	:	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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

# Section 9. Physical and chemical properties

### **Appearance**

Physical state	Liquid.	
Color	Brown.	
Odor	Characteristic.	
рН	insoluble in water.	
Boiling point	>37.78°C (>100°F)	
Flash point	Closed cup: 21°C (69.8°F)	
Evaporation rate	Not available.	
Flammability (solid, gas)	liquid	
Vapor pressure	Not available.	
Vapor density		
Relative density	1.71	
Solubility/icc)	Media Result	
Solubility(ies)	cold water Not soluble	
Auto-ignition temperature	Not available.	
Viscosity	Øynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)	

# 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.
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

FIGURE INTERSTITUTE SIGNA SALADVANCE DA BROWN

# Section 11. Toxicological information

### Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dicopper oxide	LC50 Inhalation Dusts and mists	Rat	3.34 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	500 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/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	-
zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
rosin	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	7600 mg/kg	-
bis(1-hydroxy-1H-pyridine- 2-thionato-O,S)copper	LC50 Inhalation Dusts and mists	Rat	70 mg/m³	4 hours
	LD50 Oral	Rat	1075 mg/kg	-
copper oxide	LD50 Oral	Rat	>2000 mg/kg	-
tetraethyl silicate	LC50 Inhalation Dusts and mists	Rat	10 to 16 mg/l	4 hours
	LD50 Dermal	Rabbit	5.878 g/kg	-
	LD50 Oral	Rat	6270 mg/kg	-
4,5-dichloro-2-octyl-2H- isothiazol-3-one	LC50 Inhalation Dusts and mists	Rat	0.16 mg/l	4 hours
	LD50 Dermal	Rabbit	3.9 g/kg	-
	LD50 Oral	Rat	567 mg/kg	-
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>x</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary				·	
Skin	: There are no data available	e on the mixtur	e itself.		
Eyes	: There are no data available on the mixture itself.				
Respiratory	: There are no data available	There are no data available on the mixture itself.			
Sensitization					
Conclusion/Summary					
Skin	: There are no data available	e on the mixtur	e itself.		
Respiratory	: There are no data available	e on the mixtur	e itself.		
<u>Nutagenicity</u>					

Singapore English (US)	Page: 9/15
------------------------	------------

# Section 11. Toxicological information

Conclusion/Summary	: There are no data available on the mixture itself.
<b>Carcinogenicity</b>	
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.
Reproductive toxicity	
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.
<b>Teratogenicity</b>	
Conclusion/Summary	: There are no data available on the mixture itself.
Specific target organ tox	icity (single exposure)

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
tetraethyl silicate	Category 3	-	Respiratory tract irritation
4,5-dichloro-2-octyl-2H-isothiazol-3-one	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

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

### Aspiration hazard

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

Information on the likely routes of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
Symptoms related to the phy	sical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness

Singapore	English (US)	Page: 10/15
-----------	--------------	-------------

Product name SIGMA SAILADVANCE DX BROWN

### Section 11. Toxicological information

Inhalation	<ul> <li>Adverse symptoms may include the following: respiratory tract irritation coughing</li> </ul>
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 effe	cts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. 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	: No known significant effects or critical hazards.

### Numerical measures of toxicity

ż

#### Acute toxicity estimates

Route	ATE value
Øral	1147.2 mg/kg
Dermal	7782.81 mg/kg
Inhalation (vapors)	12.82 mg/l
Inhalation (dusts and mists)	1.38 mg/l

#### Other 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.

Singapore	English (US)	Page: 11/15
-----------	--------------	-------------

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
dicopper oxide	LC50 0.003 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
4,5-dichloro-2-octyl-2H- isothiazol-3-one	Acute EC50 267.368 µg/l Marine water	Algae - Nitzschia pungens	96 hours
	Acute LC50 0.318 mg/l Marine water	Crustaceans - Artemia sp.	48 hours
	Acute LC50 0.0027 mg/l Fresh water	Fish	96 hours
	Chronic NOEC 19.789 µg/l Marine water	Algae - <i>Nitzschia pungens</i>	96 hours
	Chronic NOEC 0.00056 mg/l Fresh water	Fish	97 days
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	Acute EC50 29 to 43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
,	Acute EC50 94 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours

Conclusion/Summary

: There are no data available on the mixture itself.

### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	-	79 % - Readily - 10 days 63 % - 28 days	-	-
Conclusion/Summary	: There a	re no data available on the mixture	itself.	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
kylene ethylbenzene N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)		-	Readily Readily Readily

**Bioaccumulative potential** 

# Section 12. Ecological information

		205	
Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
rosin	1.9 to 7.7	-	High
tetraethyl silicate	3.18	-	Low
N,N'-ethane-1,2-diylbis	>6	-	High
(12-hydroxyoctadecan-			_
1-amide)			

### **Mobility in soil**

Soil/water partition	: Not available.
coefficient (Koc)	

#### 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

# Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Singapore Engli	sh (US)		Page: 13/1

Pa	ge: 13/15
----	-----------

Product code 00393268

Product name SIGMA SAILADVANCE DX BROWN

### Date of issue 14 October 2024 Version 6.01

### Section 14. Transport information

Marine pollutant	Not applicable.	(dicopper oxide)	Not applicable.
substances			

#### **Additional information**

IMDG

IATA

- UN : None identified.
  - : The marine pollutant mark is not required when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg.
    - : The environmentally hazardous substance mark may appear if required by other transportation 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.

Transport in bulk according : Not applicable. to IMO instruments

### Section 15. Regulatory information

#### Singapore - hazardous chemicals under government control

None.

### International regulations

### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 14 October 2024
Date of previous issue	: 5/22/2022
Version	: 6.01
Prepared by	: EHS
Key to abbreviations	<ul> <li>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) UN = United Nations</li> </ul>

# Section 16. Other information

Indicates information that has changed from previously issued version.

#### Notice to reader

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