# SAFETY DATA SHEET



Date of issue/Date of revision 7 October 2022

Version 7

# Section 1. Identification of the substance/mixture and of the company/undertaking

Product code : 00393297

Product name : SIGMA SAILADVANCE GX BROWN

Other means of : Not available.

identification

Product type : Liquid.

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

Product use : Antifouling products

Professional applications, Used by spraying.

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

Supplier's details : PPG Coatings (Thailand) Co., Ltd.

15 Rama 9 Road, Kwaeng Huamark, Khet Bangkapi, Bangkok 10240 Thailand

T: 662-319-4190 #224 F: 662-319-4189

**Emergency telephone** number (with hours of

operation)

: CHEMTREC 001-800-13-203-9987 (CCN 17704)

# Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2

AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

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

toxicity: 19.6%

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

toxicity: 28.3%

Thailand Page: 1/15

### Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 15.1%

### **GHS label elements**

**Hazard pictograms** 











Signal word

: Danger

**Hazard statements** 

Harmful if swallowed or if inhaled. May be harmful in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer.

Very toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

**Prevention** 

Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. 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

Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** 

: 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.

Thailand Page: 2/15

**Product name SIGMA SAILADVANCE GX BROWN** 

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

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

**CAS number** : Not applicable.

Ingredient name	%	CAS number
ølicopper oxide	25- <50	1317-39-1
rosin	10- <20	8050-09-7
zineb (ISO)	5- <10	12122-67-7
4-methylpentan-2-one	5- <10	108-10-1
zinc oxide	5- <10	1314-13-2
Solvent naphtha (petroleum), light aromatic	3 - <5	64742-95-6
xylene	3 - <5	1330-20-7
1,2,4-trimethylbenzene	1- <3	95-63-6
Talc , not containing asbestiform fibres	1- <3	14807-96-6
copper oxide	1- <3	1317-38-0
copper	0.3 - <1	7440-50-8
p-mentha-1,4(8)-diene	0.1- < 0.3	586-62-9

There are no 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.

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.

### Section 4. First aid measures

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

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

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

attention.

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

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

trained personnel.

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

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

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

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

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

#### Potential acute health effects

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

Inhalation : Harmful if inhaled.

Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Thailand Page: 3/15

**Product name SIGMA SAILADVANCE GX BROWN** 

### Section 4. First aid measures

Ingestion : Farmful if swallowed.

Over-exposure signs/symptoms

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

pain watering redness

Inhalation : No specific data.

**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 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

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

**Unsuitable extinguishing** 

media

: Do not use water jet.

Specific hazards arising from the chemical

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

Thailand Page: 4/15

**Product name SIGMA SAILADVANCE GX BROWN** 

# Section 5. Fire-fighting measures

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

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

**Small spill** 

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

Large spill

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

> **Thailand** Page: 5/15

### Section 7. Handling and storage

### **Precautions for safe** handling

: Fut on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

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
osin	ACGIH TLV (United States, 1/2021). Skin sensitizer. Inhalation sensitizer.
4-methylpentan-2-one	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.
zinc oxide	Ministry of Labor (Thailand, 8/2017).  TWA: 5 mg/m³ 8 hours. Form: Fume  TWA: 5 mg/m³ 8 hours. Form: Respirable dust  TWA: 15 mg/m³ 8 hours. Form: inhalable dust
xylene	Ministry of Labor (Thailand, 8/2017). [xylene (o-, m-, p- isomers)] TWA: 100 ppm 8 hours.
1,2,4-trimethylbenzene	ACGIH TLV (United States, 1/2021).  [Trimethyl benzene (mixed isomers)]  TWA: 123 mg/m³ 8 hours.  TWA: 25 ppm 8 hours.
Talc , not containing asbestiform fibres	Ministry of Labor (Thailand, 8/2017). TWA: 0.1 fibres/1 cc 8 hours. Form:

**Thailand** Page: 6/15 Date of issue 7 October 2022 Version 7

**Product name SIGMA SAILADVANCE GX BROWN** 

### Section 8. Exposure controls/personal protection

Respirable dust TWA: 2 mg/m³ 8 hours. Form: Respirable

dust

ACGIH TLV (United States, 1/2021). TWA: 1 mg/m³, (as Cu) 8 hours. Form:

Dust and mist

TWA: 0.2 mg/m<sup>3</sup> 8 hours. Form: Fume

Recommended monitoring procedures

Product code 00393297

copper

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

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

**Environmental exposure** controls

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

#### **Individual protection measures**

Hygiene measures

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

Eye protection

Skin protection

Hand protection

: Chemical splash goggles and face shield.

: 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.

Thailand Page: 7/15

**Product name SIGMA SAILADVANCE GX BROWN** 

### Section 8. Exposure controls/personal protection

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** 

**Boiling point** 

**Physical state** : Liquid. Color : Brown.

Odor : Characteristic. Odor threshold Not available. Hq : insoluble in water.

**Melting point** : May start to solidify at the following temperature: -43.77°C (-46.8°F) This is based

on data for the following ingredient: 1,2,4-trimethylbenzene. Weighted average:

-76.97°C (-106.5°F) : >37.78°C (>100°F)

Flash point : Closed cup: 28°C (82.4°F)

: Highest known value: 1.7 (4-methylpentan-2-one) Weighted average: **Evaporation rate** 

1.43compared with butyl acetate

Flammability (solid, gas) : liquid

Lower and upper explosive

: Greatest known range: Lower: 1.4% Upper: 7.6% (Solvent naphtha (petroleum), (flammable) limits light aromatic)

: Highest known value: 2.1 kPa (15.8 mm Hg) (at 20°C) (4-methylpentan-2-one). Vapor pressure

Weighted average: 1.21 kPa (9.08 mm Hg) (at 20°C)

Vapor density : Highest known value: 4.1 (Air = 1) (1,2,4-trimethylbenzene). Weighted average:

3.62 (Air = 1)

1.75 Relative density

Media Result Solubility(ies)

cold water Not soluble

Partition coefficient: n-

Not applicable. octanol/water

Lowest known value: 280 to 470°C (536 to 878°F) (Solvent naphtha (petroleum), Auto-ignition temperature

light aromatic).

Stable under recommended storage and handling conditions (see Section 7). Decomposition temperature :

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

**Thailand** 

Page: 8/15

**Product name SIGMA SAILADVANCE GX BROWN** 

### Section 10. Stability and reactivity

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

**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

# **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	-
rosin	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	7600 mg/kg	-
zineb (ISO)	LD50 Oral	Rat	>2000 mg/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 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	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-
copper oxide	LD50 Oral	Rat	>2000 mg/kg	-
copper	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours
p-mentha-1,4(8)-diene	LD50 Oral	Rat	4390 mg/kg	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

Irritation/Corrosion

Page: 9/15 **Thailand** 

### **Product name SIGMA SAILADVANCE GX BROWN**

### **Section 11. Toxicological information**

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 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** 

3	Route of exposure	Species	Result
zineb (ISO)	skin	Guinea pig	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
zíneb (ISO)	Category 3	-	Respiratory tract irritation
4-methylpentan-2-one	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Name	Result
4-methylpentan-2-one	ASPIRATION HAZARD - Category 2
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
p-mentha-1,4(8)-diene	ASPIRATION HAZARD - Category 1

Thailand Page: 10/15

**Product name SIGMA SAILADVANCE GX BROWN** 

# **Section 11. Toxicological information**

Information on the likely routes of exposure

: Not available.

### Potential acute health effects

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

Inhalation : Harmful if inhaled.

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

May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

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

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

pain watering redness

Inhalation : No specific data.

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

pain or irritation redness

dryness cracking

blistering may occur

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

stomach pains

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

**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 effects

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

exposure.

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

Thailand Page: 11/15

Product code 00393297

Product name SIGMA SAILADVANCE GX BROWN

On a time A 4 Transiana Language Line for succession and the su

### **Section 11. Toxicological information**

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

Route	ATE value
<b>Ø</b> ral	1224.06 mg/kg
Dermal	3347.81 mg/kg
Inhalation (vapors)	55.82 mg/l
Inhalation (dusts and mists)	3.44 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.

# **Section 12. Ecological information**

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
dicopper oxide	LC50 0.003 mg/l	Fish	96 hours
4-methylpentan-2-one	Acute LC50 >179 mg/l	Fish	96 hours
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
Solvent naphtha (petroleum), light aromatic		Fish	96 hours
copper	Acute LC50 810 ppb	Fish	96 hours

**Conclusion/Summary** 

: There are no data available on the mixture itself.

### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
✓ methylpentan-2-one	OECD 301F	83 % - Readily - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
	-	-	Readily
xylene	-	-	Readily

#### **Bioaccumulative potential**

Thailand Page
---------------

**Product name SIGMA SAILADVANCE GX BROWN** 

### Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
<b>k</b> sin	1.9 to 7.7	-	high
zineb (ISO)	1.3	-	low
4-methylpentan-2-one	1.9	-	low
xylene	3.12	7.4 to 18.5	low
1,2,4-trimethylbenzene	3.63	120.23	low
p-mentha-1,4(8)-diene	4.47	-	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	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(dicopper oxide, zinc oxide)	Not applicable.

Thailand Page: 13/15

**Product name SIGMA SAILADVANCE GX BROWN** 

### **Section 14. Transport information**

#### **Additional information**

UN None identified.

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

**IATA** : 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

**Harmful Chemicals List** 

Safety, health and environmental regulations specific for the product

: Listed

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

#### 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

: 7 October 2022

**Date of previous issue** 5/22/2021

: 7 **Version Prepared by** : EHS

Key to abbreviations : ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

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

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

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

LogPow = logarithm of the octanol/water partition coefficient

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

**Thailand** Page: 14/15

**Product name SIGMA SAILADVANCE GX BROWN** 

### **Section 16. Other information**

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
RID = The Regulations concerning the International Carriage of Dangerous Goods
by Rail
UN = United Nations

Indicates information that has changed from previously issued version.

### **Notice to reader**

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

Thailand Page: 15/15