SAFETY DATA SHEET

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 26 June 2023

Version 1.02

Section 1. Chemica	I product and	company identification
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Product code	: 00468615
Product name	: SIGMA SAILADVANCE DX III-1 REDBROWN
产品名称	: 高性能无锡自抛光防污漆 DX III-1 红棕色
Product type	: Liquid.
Relevant identified uses of t	the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Antifouling products
Uses advised against	: Not applicable.
Supplier's details	: PPG Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857
Emergency telephone number (with hours of operation)	: 00 86 532 83889090

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview Liquid. Characteristic. Flammable liquid and vapour. Harmful if swallowed or if inhaled. May be harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you

feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Immediately call a POISON CENTER or doctor.

See Section 12 for environmental precautions.

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 CARCINOGENICITY - Category 2 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 8.5% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 32.5% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 26.1% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 26.1% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 26.1% Evaluation of the top of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 26.1% Evaluation of the top of the mixture consisting of the mixture consisting of the top of unknown hazards to the aquatic environment: 26.1%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapour. Harmful if swallowed or if inhaled. May be harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. 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 vapour. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
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. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation 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.
Suitable extinguishing media	: Use dry chemical, CO_2 , water spray (fog) or foam.

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Section 2. Hazards identification

Storage	1	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.
Physical and chemical hazards	:	Flammable liquid and vapour.
Health hazards	:	Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.
Symptoms related to the phy	sic	al, 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 effect	:ts	as well as chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects Long term exposure	:	Not available.
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Environmental hazards	:	Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.
Section 3 Compo	cit	tion/information on ingradiants

Section 3. Composition/information on ingredients

Substance	/mixture	:

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Mixture
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CAS number/other identifiers

CAS number

: Not applicable.

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
dicopper oxide	25 - <40	1317-39-1
xylene isomers mixture	10 - <25	1330-20-7
zinc oxide	10 - <25	1314-13-2
Talc , not containing asbestiform fibres	1 - <10	14807-96-6
ethylbenzene	1 - <10	100-41-4
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper	1 - <10	14915-37-8
copper oxide	0.1 - <1	1317-38-0
copper	0.1 - <1	7440-50-8

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 recognised skin cleanser. Do NOT use solvents or thinners.		
Ingestion	 If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting. 		

Most important symptoms/effects, acute and delayed

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Ingestion	: Adverse symptoms may include the following: stomach pains	
Skin contact	pain or irritation redness dryness cracking blistering may occur	
Inhalation Skin contact	 No specific data. Adverse symptoms may include the following: 	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Over-exposure signs/sy	•	
Ingestion	: Harmful if swallowed.	
Skin contact	: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.	
Inhalation	: Harmful if inhaled.	
Eye contact	: Causes serious eye damage.	
Potential acute health e	ffects	

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Section 4. First aid measures

Indication of immediate med	lical 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. Firefigh	nting measures
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapour. 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 oxides of lead
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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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Section 6. Accidental release measures

For emergency responders	:	If specialised 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 spilt 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 material for con	tai	nment 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 the 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	Put on appropriate personal protective equipment (see Section 8). 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 vapour 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.
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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
dicopper oxide		GBZ 2.1 (China, 8/2019). [Copper Copper
		fume, as Cu]
		PC-TWA: 0.2 mg/m ³ , (as Cu) 8 hours.
		Form: Fume
xylene isomers mixture		GBZ 2.1 (China, 8/2019). [Xylene (all
		isomers)]
		PC-STEL: 100 mg/m ³ 15 minutes.
		PC-TWA: 50 mg/m ³ 8 hours.
zinc oxide		GBZ 2.1 (China, 8/2019).
		PC-STEL: 5 mg/m ³ 15 minutes.
-		PC-TWA: 3 mg/m ³ 8 hours.
Talc , not containing asbestif	orm fibres	GBZ 2.1 (China, 8/2019).
		PC-TWA: 1 mg/m ³ 8 hours. Form:
		Respirable dust
		PC-TWA: 3 mg/m ³ 8 hours. Form: Total
		dust
ethylbenzene		GBZ 2.1 (China, 8/2019). PC-STEL: 150 mg/m ³ 15 minutes.
		PC-STEL: 150 mg/m ^o 15 minutes. PC-TWA: 100 mg/m ³ 8 hours.
copper oxide		GBZ 2.1 (China, 8/2019). [Copper Copper
copper oxide		fume, as Cu]
		PC-TWA: 0.2 mg/m ³ , (as Cu) 8 hours.
		Form: Fume
copper		GBZ 2.1 (China, 8/2019).
ooppoi		PC-TWA: 1 mg/m ³ , (as Cu) 8 hours. Form:
		Dust
Recommended monitoring	· Poforonco should be made to ar	propriate monitoring standards. Reference to
procedures		methods for the determination of hazardous
nocedules	substances will also be required.	
Appropriate engineering	: Use only with adequate ventilation	on. Use process enclosures, local exhaust
controls		controls to keep worker exposure to airborne
		nended or statutory limits. The engineering controls
		r dust concentrations below any lower explosive
	limits. Use explosion-proof venti	ilation equipment.
Environmental exposure	: Emissions from ventilation or wo	rk process equipment should be checked to ensure
-	they comply with the requiremen	ts of environmental protection legislation. In some
	they comply with the requiremen cases, fume scrubbers, filters or	ts of environmental protection legislation. In some engineering modifications to the process
	they comply with the requiremen cases, fume scrubbers, filters or	ts of environmental protection legislation. In some
controls	they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to re	ts of environmental protection legislation. In some engineering modifications to the process
controls	they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to re res	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels.
controls dividual protection measur	 they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to reserve server to reserve server the server server	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels.
controls dividual protection measur	 they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to reserve the second sec	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels. thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing.
controls dividual protection measur	 they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to res Wash hands, forearms and face eating, smoking and using the la Appropriate techniques should b Wash contaminated clothing before 	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels. thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing. ore reusing. Ensure that eyewash stations and
controls dividual protection measur	 they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to reserve the second sec	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels. thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing. ore reusing. Ensure that eyewash stations and
Environmental exposure controls <u>idividual protection measur</u> Hygiene measures Eye protection	 they comply with the requiremen cases, fume scrubbers, filters or equipment will be necessary to res Wash hands, forearms and face eating, smoking and using the la Appropriate techniques should b Wash contaminated clothing before 	engineering modifications to the process educe emissions to acceptable levels. thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing. ore reusing. Ensure that eyewash stations and workstation location.
controls Idividual protection measur Hygiene measures	 they comply with the requirement cases, fume scrubbers, filters or equipment will be necessary to researche the second second	ts of environmental protection legislation. In some engineering modifications to the process educe emissions to acceptable levels. thoroughly after handling chemical products, before vatory and at the end of the working period. e used to remove potentially contaminated clothing. ore reusing. Ensure that eyewash stations and workstation location.

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Section 8. Exposure controls/personal 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.
: For prolonged or repeated handling, use the following type of gloves:
Not recommended: nitrile rubber Recommended: polyvinyl alcohol (PVA), Viton®
: 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.
 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.
: 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	1	Liquid.			
Odour	:	Characteristic.	Characteristic.		
Boiling point	1	>37.78°C (>100	0°F)		
Flash point	:	Closed cup: 25	Closed cup: 25°C (77°F)		
Lower and upper explosive (flammable) limits	:	Greatest knowr	n range: Lower: 0.8% Upper: 6.7% (xylene)		
Relative density	1	1.81			
Solubility(ies)		Media	Result		
Solubility(les)	1	cold water	Not soluble		
Viscosity	:	Kinematic (40°	C): >21 mm²/s		

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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: oxidising 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
dícopper oxide	LC50 Inhalation Dusts	Rat	3.34 mg/l	4 hours
	and mists			
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	500 mg/kg	-
xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
zinc oxide	LC50 Inhalation Dusts	Rat	>5700 mg/m ³	4 hours
	and mists		_	
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
ethylbenzene	LC50 Inhalation	Rat	17.8 mg/l	4 hours
-	Vapour		_	
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
bis(1-hydroxy-1H-pyridine-	LC50 Inhalation Dusts	Rat	70 mg/m³	4 hours
2-thionato-O,S)copper	and mists		_	
	LD50 Oral	Rat	1075 mg/kg	-
copper oxide	LD50 Oral	Rat	>2000 mg/kg	-
copper	LC50 Inhalation Dusts	Rat	>5.11 mg/l	4 hours
	and mists			

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

Sensitisation

Not available.

Mutagenicity

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Section 11. Toxicological information

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on likely routes : Not available. of exposure

Potential acute health effects		
Eye contact	1	Causes serious eye damage.
Inhalation	:	Harmful if inhaled.

Skin contact	• M	ay be harmful in contact with skin.	Causes skin irritation	Defatting to the skin
Skill Cultact	• IVIč	ay de namhui in contact with Skin.	Causes skin initiation.	Defatiling to the skin.

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

Section 11. Toxicological information

Delayed and immediate effec	ts as well as 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 effe	i <u>cts</u>
General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
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.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
GMA SAILADVANCE DX III-1 REDBROWN	1573.7	2432.2	N/A	15.4	1.7
dicopper oxide	500	2500	N/A	N/A	3.34
xylene isomers mixture	4300	1700	N/A	11	1.5
zinc oxide	N/A	2500	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper	1075	N/A	N/A	0.5	0.07
copper oxide	2500	N/A	N/A	N/A	N/A

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 vapour/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

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Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
dicopper oxide	LC50 0.003 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 -	48 hours
		Neonate	
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
copper	Acute LC50 810 ppb	Fish	96 hours

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Readily - 10 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
xylene isomers mixture ethylbenzene	-		-		Readily Readily	

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene isomers mixture	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low

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 minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	•			
	China	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	Ш	111	Ш	Ш
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(dicopper oxide, zinc oxide)	Not applicable.

Additional information CN : None identified. UN : None identified. IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. IATA : The environmentally hazardous substance mark may appear if required by other transported in sizes of ≤5 L or ≤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

China inventory (IECSC)	: All components are listed or exempted.
References	 Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

Date of issue 26 June 2023

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 26 June 2023
Date of previous issue	: 3/17/2023
Version	: 1.02
	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, 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.