SAFETY DATA SHEET

AMERCOAT 235 HAZE GRAY F/S 26270



Date of issue 18 August 2023

Version 17

1. Product and company identification

: AMERCOAT 235 HAZE GRAY F/S 26270
: 00334053
: Liquid.
of the substance or mixture and uses advised against
: Industrial applications, Used by spraying.
: Coating.
: Not applicable.
: ₱₽G PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777
: 078 574 2777

2. Hazards identification

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	 Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause cancer. May damage fertility or the unborn child. Causes damage to organs. (respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, respiratory organs)
Signal word Hazard statements	: Danger : F ammable liquid and vapor.
GHS label elements Hazard pictograms	
GHS Classification	 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 2

2. Hazards identification

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. Avoid release to the environment. Do not breathe 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: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	;	Prolonged or repeated contact may dry skin and cause irritation.

3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number	: Not applicable.
CSCL number	: Not available.

Ingredient name	%	CAS number	CSCL
F alc containing no asbestos or quartz	25 - <50	14807-96-6	Not available.
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15 - <20	1675-54-3	4-209; 7-1279; 7-1283
Solvent naphtha (petroleum), light aromatic	5 - <7	64742-95-6	Not available.
1-Butanol	5 - <7	71-36-3	2-3049
titanium dioxide (excluding nanoparticle)	5 - <7	13463-67-7	1-558; 5-5225
Polyisocyanate, Alkyl Phenol Blocked	3 - <5	SUB104447	Not available.
1,2,4-Trimethylbenzene	3 - <5	95-63-6	3-3427; 3-7
Mica	3 - <5	12001-26-2	Not available.
Methyl n-pentyl ketone	2 - <3	110-43-0	2-542
Xylene	0.2 - <0.5	1330-20-7	3-3; 3-60
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	0.2 - <0.5	123-26-2	2-2720
Cumene	0.1 - <0.2	98-82-8	3-22
4-Nonylphenol (branched)	0.1 - <0.2	84852-15-3	3-503
carbon black	0.1 - <0.2	1333-86-4	5-3328; 5-5222

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.

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 effe	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Causes damage to organs following a single exposure if swallowed.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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)

5. Fire-fighting 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 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 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 metal oxide/oxides Cyanate and isocyanate. hydrogen cyanide
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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
·	: 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 co	ntainment 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.

6. Accidental release measures

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.

7. Handling and storage

Precautions for safe : 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 handling this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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 : Do not store above the following temperature: 50°C (122°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.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
ralc containing no asbestos or quartz	Japan Society for Occupational Health (Japan, 9/2022). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)] OEL-M: 0.5 mg/m ³ 8 hours. Form: Respirable dust (Class 1 Dust) OEL-M: 2 mg/m ³ 8 hours. Form: Total dust (Class 1 Dust)
1-Butanol	Japan Society for Occupational Health (Japan, 9/2022). Absorbed through skin. OEL-C: 150 mg/m ³ OEL-C: 50 ppm Industrial Safety and Health Act (Japan,
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8. Exposure controls/personal protection

8. Exposure cont	rois/personal protection	
		6/2020).
		TWA: 25 ppm 8 hours.
1,2,4-Trimethylbenzene		Japan Society for Occupational Health
		(Japan, 9/2022).
		OEL-M: 120 mg/m ³ 8 hours.
		OEL-M: 25 ppm 8 hours.
Xylene		Industrial Safety and Health Act (Japan,
		6/2020). [xylene]
		TWA: 50 ppm 8 hours.
		Japan Society for Occupational Health (Japan, 9/2022).
		OEL-M: 50 ppm 8 hours.
		OEL-M: 217 mg/m ³ 8 hours.
Cumene		Japan Society for Occupational Health
Guinene		(Japan, 9/2022). Absorbed through skin.
		OEL-M: 50 mg/m ³ 8 hours.
		OEL-M: 10 ppm 8 hours.
Recommended monitoring	: Reference should be made to appropri	iate monitoring standards. Reference to
procedures		ods for the determination of hazardous
procedures	substances will also be required.	
	•	
Appropriate engineering	: Use only with adequate ventilation. Us	e process enclosures, local exhaust ventilation
controls		vorker exposure to airborne contaminants
Controls		imits. The engineering controls also need to
		s below any lower explosive limits. Use
	explosion-proof ventilation equipment.	
Environmental exposure	: Emissions from ventilation or work pro	cess equipment should be checked to ensure
controls		nvironmental protection legislation. In some
		eering modifications to the process equipment
	will be necessary to reduce emissions	to acceptable levels.
Individual protection measu		
Hygiene measures		ughly after handling chemical products, before
	eating, smoking and using the lavatory	
		d to remove potentially contaminated clothing. t be allowed out of the workplace. Wash
	•	Ensure that eyewash stations and safety
	showers are close to the workstation lo	
Eye protection	: Chemical splash goggles and face shie	eld
Skin protection		
	· Chamical registant immembians along	a production with an approximate tendend about
Hand protection		complying with an approved standard should
		emical products if a risk assessment indicates ameters specified by the glove manufacturer,
		till retaining their protective properties. It
	should be noted that the time to breakt	
		ers. In the case of mixtures, consisting of
	several substances, the protection time	
	estimated.	
Gloves	: butyl rubber	
Dedu protection	· Developed exetenting a submerset for the	hady abayld be calcuted based on the task

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.

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.

9. Physical and chemical properties

Appearance			
Physical state	: Liquid.		
Color	: Gray.		
Odor	: Characteristic.		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 36.67°C (98°F)		
Evaporation rate	: 0.35 (butyl acetate = 1)		
Vapor pressure	: 0.81 kPa (6.1 mm Hg)		
Relative density	: 1.41		
Colubility/ico)	Media	Result	
Solubility(ies)	cold water	Not soluble	

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** : Under normal conditions of storage and use, hazardous reactions will not occur. reactions **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. : Depending on conditions, decomposition products may include the following Hazardous decomposition products materials: Cyanate and isocyanate. carbon oxides nitrogen oxides hydrogen cyanide metal oxide/oxides

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
s-[4-(2,3-epoxipropoxi)	LD50 Dermal	Rabbit	23000 mg/kg	-
L	LD50 Oral	Rat	15000 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
5	LD50 Oral	Rat	8400 mg/kg	-
1-Butanol	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
titanium dioxide (excluding nanoparticle)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
1 ,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Methyl n-pentyl ketone	LC50 Inhalation Vapor	Rat	16.7 mg/l	4 hours
	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/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	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	2260 mg/kg	-
4-Nonylphenol (branched)	LD50 Dermal	Rabbit	2.14 g/kg	-
- · · · · ·	LD50 Oral	Rat	1300 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-	
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-	
	Skin - Edema	Rabbit	0.5	4 hours	-	
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-	
	Skin - Mild irritant	Rabbit	-	4 hours	-	
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-	
4-Nonylphenol (branched)	Skin - Erythema/Eschar	Rabbit	4	-	-	

Sensitization

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

Mutagenicity

Not available.

Carcinogenicity

11. Toxicological information

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
₮alc containing no asbestos or quartz	Category 1	-	respiratory organs
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
1-Butanol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Polyisocyanate, Alkyl Phenol Blocked	Category 3	-	Respiratory tract irritation
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Methyl n-pentyl ketone	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Cumene	Category 1	-	nervous system
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
4-Nonylphenol (branched)	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
✓alc containing no asbestos or quartz	Category 1	-	respiratory organs
1-Butanol	Category 1	-	central nervous system (CNS), hearing organs
titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
Mica	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Cumene	Category 2	-	respiratory organs
4-Nonylphenol (branched)	Category 2	-	kidneys, liver
carbon black	Category 1	-	respiratory organs

Aspiration hazard

11. Toxicological information

Name	Result
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	: Not available.
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Causes damage to organs following a single exposure if swallowed.
Symptoms related to the	hysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effect	<u>cts</u>	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health eff	ect	<u>s</u>
General	:	Causes damage to organs through prolonged or repeated exposure. 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	:	\mathbf{M} ay cause cancer. Risk of cancer depends on duration and level of exposure.
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11. Toxicological information

- Mutagenicity
- : No known significant effects or critical hazards.
- Reproductive toxicity
- : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
MERCOAT 235 HAZE GRAY F/S 26270	79349.5	23740.4	N/A	265.4	N/A
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
1-Butanol	N/A	3400	N/A	24	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
Methyl n-pentyl ketone	1600	10206	N/A	16.7	N/A
Xylene	4300	1700	N/A	11	N/A
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	2500	2500	N/A	N/A	N/A
Cumene	2260	12300	N/A	11	N/A
4-Nonylphenol (branched)	1300	2140	N/A	N/A	N/A

Other information

Prolonged or repeated contact may dry skin and cause irritation. 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.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
s-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
1-Butanol	Acute LC50 1376 mg/l	Fish	96 hours
titanium dioxide (excluding nanoparticle)	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
Methyl n-pentyl ketone	Acute LC50 131 mg/l	Fish	96 hours
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	Acute EC50 29 to 43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
4-Nonylphenol (branched)	Acute EC50 94 mg/l Acute EC50 0.044 mg/l Acute LC50 0.221 mg/l	Daphnia - <i>Daphnia magna</i> Crustaceans - <i>Moina macrocopa</i> Fish	48 hours 48 hours 96 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Methyl n-pentyl ketone N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	OECD 310 -	69 % - Readily - 28 days 63 % - 28 days	-	-

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12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
pis-[4-(2,3-epoxipropoxi) phenyl]propane Methyl n-pentyl ketone Xylene N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)		-	Not readily Readily Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1-Butanol	1	-	Low
1,2,4-Trimethylbenzene	3.63	120.23	Low
Methyl n-pentyl ketone	2.26	-	Low
Xylene	3.12	7.4 to 18.5	Low
N,N'-ethane-1,2-diylbis	>6	-	High
(12-hydroxyoctadecan-			
1-amide)			
Cumene	3.55	35.48	Low
4-Nonylphenol (branched)	5.4	251.19	Low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.
Other adverse effects	: No known significant effects or critical

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.

hazards.

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			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.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane, Solvent naphtha (petroleum), light aromatic)	Not applicable.

Additional information

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	: 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

15. Regulatory information

Fire Service Law

Category		Danger category	Signal word	Designated quantity
Category IV	Class II petroleums	III	Flammable - Keep Fire Away	1000 L

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
	4.9	Class 1	691

Industrial Safety and Health Act

Ordinance on the rifevention of the nazard due	to opecifica offen	ilear oubstances	
	%	Status	Reference number
None of the components are listed.			
Substance(s) requiring labelling			

15. Regulatory information

Ingredient name	%	Status	Reference number
₽etroleum naphtha	≤10	Listed	330
Butanol	≤10	Listed	477
Titanium(IV) oxide	≤10	Listed	191
Trimethylbenzene	≤10	Listed	404
Methyl n-pentyl ketone	≤10	Listed	586
Xylene	≤10	Listed	136

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Petroleum naphtha	≤10	Listed	330
Butanol	≤10	Listed	477
Titanium(IV) oxide	≤10	Listed	191
Trimethylbenzene	≤10	Listed	404
Methyl n-pentyl ketone	≤10	Listed	586
Xylene	≤10	Listed	136
Cumene	≤10	Listed	138
Carbon black	≤10	Listed	130

<u>Carcinogen</u>

None of the components are listed.

<u>Mutagen</u>

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable, Combustible
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed
Harmful Substances, Prohibited for Manufacturing	: Not listed
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable, Combustible
Lead regulation	: Not listed
Organic solvents poisoning prevention	: Class 2

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

15. Regulatory information

Ingredient name	%	Status	Reference number
Polycondensate of 4,4'-isopropylidenediphenol and 1-chloro-2,3-epoxypropane (liquid only)	17.225	Priority assessment	87
1-Butanol	5.2672	Priority assessment	124
1,2,4-Trimethylbenzene	3.7545	Priority assessment	49
1,3,5-Trimethylbenzene	0.62575	Priority assessment	201
Xylene	0.30819	Priority assessment	125
Cumene	0.12615	Priority assessment	126
Ethylbenzene	0.08615	Priority assessment	50
Toluene	0.01284	Priority assessment	46
Benzene	0.011469	Priority assessment	45
Naphthalene	0.011263	Priority assessment	76
Propane-1,2-diol	0.00984	Priority assessment	106
Methyl isobutyl ketone	0.0006051	Priority assessment	116
Epichlorohydrin	0.000017225	Priority assessment	22

High Pressure Gas Control : Not available. Law

Explosives Control Law

None of the components are listed.

Law concerning prevention : Not available. of pollution of the ocean

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

Container class

None of the components are listed.

JSOH Carcinogen	: Group 1
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: At least one component is not listed.
Road law	: Not available.

16. Other information

<u>History</u>	
Date of issue/Date of revision	: 18 August 2023
Date of previous issue	: 3/12/2022
Version	: 17
Prepared by	: EHS

16. Other information

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
V Indiantan information th	at has shanned from providually issued varian

V 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.