SAFETY DATA SHEET

AMERCOAT 138G DK GRAY TYPE I/II/IV KIT

Date of issue 12 June 2024
Version 19

1. Product and company identification

Product name : AMERCOAT 138G DK GRAY TYPE I/II/IV KIT
Product code : 00333924
Product type : Liquid.

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

Product use : Industrial applications, Used by spraying.
Use of the substance/ mixture : Coating.
Uses advised against : Not applicable.

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777

Emergency telephone number : 078 574 2777

2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 3
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Flammable liquid and vapor.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
May cause cancer.
May cause damage to organs. (respiratory organs)
Causes damage to organs through prolonged or repeated exposure. (central

2. Hazards identification

nervous system (CNS), lungs, respiratory organs)
Harmful 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 only outdoors or in a well-ventilated area. 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 : IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. 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. Store in a well-ventilated place. Keep container tightly closed.

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
Aluminium oxide	25 - <50	1344-28-1	1-23
bis-[4-(2,3-epoxipropoxi)phenyl]propane	7 - <10	1675-54-3	4-209; 7-1279; 7-1283
Amorphous silica (silica gel, precipitated silica)	5 - <7	112926-00-8	1-548
Magnesium oxide	3 - <5	1309-48-4	1-465
Solvent naphtha (petroleum), light aromatic	3 - <5	64742-95-6	Not available.
Diiron trioxide	2 - <3	1309-37-1	1-357; 5-5188
1,2,4-Trimethylbenzene	1 - <2	95-63-6	3-3427; 3-7
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	1 - <2	68609-97-2	2-2426
Titanium dioxide (excluding nanoparticle)	1 - <2	13463-67-7	1-558; 5-5225
Butyl acetate	1 - <2	123-86-4	2-731
Silica gel	1 - <2	63231-67-4	1-548
benzyl alcohol	0.5 - <1	100-51-6	3-1011
Isophoronediamine	0.5 - <1	2855-13-2	3-2286
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	0.2 - <0.5	123-26-2	2-2720
carbon black	0.2 - <0.5	1333-86-4	5-3328; 5-5222
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	0.2 - <0.5	25513-64-8	2-154; 2-3719
Xylene	0.1 - <0.2	1330-20-7	3-3; 3-60
Silica	0.1 - <0.2	7631-86-9	1-548
Methanol	0.1 - <0.2	67-56-1	2-201
Nickel	<0.1	7440-02-0	Not available.

3. Composition/information on ingredients

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 : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation.

Skin contact : May cause 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 : May cause damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

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

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 handling : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not 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
Aluminium oxide	**Japan Society for Occupational Health (Japan, 5/2023). [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite, Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder)]** OEL-M: 0.5 mg/m³ 8 hours. Form: Respirable dust (Class 1 Dust) OEL-M: 2 mg/m³ 8 hours. Form: Total dust (Class 1 Dust)
Diiron trioxide	**Japan Society for Occupational Health (Japan, 5/2023). [Class 2 dusts (Bakelite (asbestos-free, technical grade), Carbon black, Coal, Cork dust, Cotton dust, Iron oxide, Grain dust, Joss stick material dust, Marble, Portland cement, Zinc**

8. Exposure controls/personal protection

	oxide)] OEL-M: 1 mg/m³ 8 hours. Form: Respirable dust (Class 2 Dust) OEL-M: 4 mg/m³ 8 hours. Form: Total dust (Class 2 Dust)
1,2,4-Trimethylbenzene	**Japan Society for Occupational Health (Japan, 5/2023).** OEL-M: 120 mg/m³ 8 hours. OEL-M: 25 ppm 8 hours.
Titanium dioxide (excluding nanoparticle)	**Japan Society for Occupational Health (Japan, 5/2023). [titanium dioxide]** OEL-M: 1.5 mg/m³, (as Ti) 8 hours. Form: Respirable particulate matter OEL-M: 2 mg/m³, (as Ti) 8 hours. Form: Total particulate matter **Japan Society for Occupational Health (Japan, 5/2023). [titanium dioxide (nanoparticle)]** OEL-M: 0.3 mg/m³ 8 hours. Form: nanoparticle
Butyl acetate	**Japan Society for Occupational Health (Japan, 5/2023).** OEL-M: 475 mg/m³ 8 hours. OEL-M: 100 ppm 8 hours. **Industrial Safety and Health Act (Japan, 6/2020).** TWA: 150 ppm 8 hours.
benzyl alcohol	**Japan Society for Occupational Health (Japan, 5/2023). Skin sensitizer.** OEL-C: 25 mg/m³
Xylene	**Industrial Safety and Health Act (Japan, 6/2020). [xylene]** TWA: 50 ppm 8 hours. **Japan Society for Occupational Health (Japan, 5/2023).** OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m³ 8 hours.
Methanol	**Japan Society for Occupational Health (Japan, 5/2023). Absorbed through skin.** OEL-M: 260 mg/m³ 8 hours. OEL-M: 200 ppm 8 hours. **Industrial Safety and Health Act (Japan, 6/2020).** TWA: 200 ppm 8 hours.
Nickel	**Japan Society for Occupational Health (Japan, 5/2023). Skin sensitizer. Inhalation sensitizer.** OEL-M: 1 mg/m³ 8 hours. **Technical Guideline Concerning the Applications, etc. of Concentration Standard for Preventing Health Hazards (Japan, 4/2023).** TWA: 1 mg/m³ 8 hours.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8. Exposure controls/personal protection

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

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

Individual protection 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 : Chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Gray.

Odor : Characteristic.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 40°C (104°F)

Evaporation rate : 0.41 (butyl acetate = 1)

Vapor pressure : 1.7 kPa (12.5 mm Hg)

9. Physical and chemical properties

Relative density : 1.95

Solubility(ies) :

Media	Result
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 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 halogenated compounds metal oxide/ oxides

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aluminium oxide	LC50 Inhalation Dusts and mists	Rat	7.6 mg/l	4 hours
	LD50 Oral	Rat	>15900 mg/kg	-
bis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
Amorphous silica (silica gel, precipitated silica)	LD50 Dermal	Rabbit	>5000 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	-
Diiron trioxide	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	10 g/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
	LD50 Oral	Rat	5 g/kg	-
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	LD50 Oral	Rat	17100 mg/kg	-
Titanium dioxide (excluding nanoparticle)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-

11. Toxicological information

	LD50 Oral	Rat	10.768 g/kg	-
Silica gel	LD50 Oral	Rat	31.6 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
Isophoronediamine	LC50 Inhalation Dusts and mists	Rat	>5.01 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1030 mg/kg	-
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	LD50 Oral	Rat	910 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Silica	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Methanol	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/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	-
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	Skin - Primary dermal irritation index (PDII)	Rabbit	8	-	-
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	skin	Guinea pig	Sensitizing
Isophoronediamine	skin	Guinea pig	Sensitizing
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	skin	Guinea pig	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

11. Toxicological information

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Aluminium oxide	Category 3	-	Respiratory tract irritation
Amorphous silica (silica gel, precipitated silica)	Category 3	-	Respiratory tract irritation
Magnesium oxide	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
Diiron trioxide	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Butyl acetate	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
benzyl alcohol	Category 1	-	central nervous system (CNS), kidneys
	Category 3		Narcotic effects
Xylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Silica	Category 3	-	Respiratory tract irritation
Methanol	Category 1	-	central nervous system (CNS), systemic toxicity, visual organ
	Category 3		Narcotic effects
Nickel	Category 1	-	kidneys, respiratory organs

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Aluminium oxide	Category 1	-	lungs
Diiron trioxide	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
Titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
benzyl alcohol	Category 1	-	central nervous system (CNS)
Isophoronediamine	Category 2	-	respiratory system
carbon black	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Silica	Category 1	-	immune system, kidneys,

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Methanol	Category 1	-	respiratory organs central nervous system (CNS), visual organ
Nickel	Category 1	-	respiratory organs

Aspiration hazard

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

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation.

Skin contact : May cause 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 : May cause damage to organs following a single exposure if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

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

Short term exposure

Potential immediate 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 : 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 : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

11. Toxicological information

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 (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
AMERCOAT 138G DK GRAY TYPE I/II/IV KIT	N/A	59543.4	N/A	907.9	N/A
Aluminium oxide	N/A	N/A	N/A	N/A	7.6
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
Diiron trioxide	10000	N/A	N/A	N/A	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	17100	N/A	N/A	N/A	N/A
Butyl acetate	10768	N/A	N/A	N/A	N/A
Silica gel	31600	N/A	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	N/A
Isophoronediamine	1030	2500	N/A	N/A	N/A
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	2500	2500	N/A	N/A	N/A
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	910	N/A	N/A	N/A	N/A
Xylene	4300	1700	N/A	11	N/A
Methanol	500	15800	64000	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 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
Aluminium oxide	Acute LC50 >100 mg/l	Fish	96 hours
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - *daphnia magna*	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Amorphous silica (silica gel, precipitated silica)	NOEC >1000 ppm	Daphnia - *Daphnia magna*	24 hours
	Acute NOEC >10000 ppm Fresh water	Fish	96 hours Static
	Acute NOEC >10000 ppm	Fish - *Brachydanio rerio*	4 days Static
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Diiron trioxide	Acute EC50 >100 mg/l	Daphnia	48 hours
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	LC50 >100 mg/l	Fish	96 hours
Titanium dioxide (excluding nanoparticle)	Acute LC50 >100 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
Butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
N,N'-ethane-1,2-diylbis	Acute EC50 29 to 43 mg/l	Algae - *Pseudokirchneriella*	72 hours

12. Ecological information

(12-hydroxyoctadecan-1-amide)		*subcapitata*	
	Acute EC50 94 mg/l	Daphnia - *Daphnia magna*	48 hours
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	NOEC 16 mg/l	Algae - *pseudokirchneriella subcapitata*	72 hours
	Acute EC50 29.5 mg/l	Algae - *Scenedesmus subspicatus*	72 hours
Silica	Acute EC50 2.2 g/L Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 >10000 mg/l	Fish	96 hours
	Chronic NOEC 12.5 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	21 days
Methanol	Acute LC50 13 mg/l Fresh water	Fish	96 hours
Nickel	Chronic EC10 6.9 µg/l	Daphnia - *Daphnia magna* - Neonate	21 days

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	-	63 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	-	Not readily
Amorphous silica (silica gel, precipitated silica)	-	-	Not readily
Butyl acetate	-	-	Readily
benzyl alcohol	-	-	Readily
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	-	-	Readily
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	-	-	Not readily
Xylene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Amorphous silica (silica gel, precipitated silica)	-	0	Low
1,2,4-Trimethylbenzene	3.63	120.23	Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs	3.77	-	Low
Butyl acetate	2.3	-	Low
benzyl alcohol	0.87	-	Low
Isophoronediamine	0.99	-	Low
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	>6	-	High
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	-0.3	-	Low
Xylene	3.12	7.4 to 18.5	Low
Methanol	-0.77	-	Low

12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

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.

14. Transport information

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

Additional information

UN : None identified.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14. Transport information

Transport in bulk according to IMO instruments : Not applicable.

15. Regulatory information

Fire Service Law

Category	Substance name/Type	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
Trimethylbenzene	2.6	Class 1	691

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed.

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Aluminium oxide	≥20 - ≤30	Listed	189
Petroleum naphtha	≤10	Listed	330
Trimethylbenzene	≤10	Listed	404
Iron oxide	≤10	Listed	192
Titanium(IV) oxide	≤10	Listed	191
Butyl acetate	≤10	Listed	181
Crystalline silica	≤10	Listed	165-2

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Aluminium oxide	≥20 - ≤30	Listed	189
Petroleum naphtha	≤10	Listed	330
Trimethylbenzene	≤10	Listed	404
Iron oxide	≤10	Listed	192
Titanium(IV) oxide	≤10	Listed	191
Butyl acetate	≤10	Listed	181
Carbon black	≤10	Listed	130
Crystalline silica	≤10	Listed	165-2
Xylene	≤10	Listed	136
Methanol	≤10	Listed	560

Carcinogens based on Article 577-2 of the Ordinance on ISH

Ingredient name	%	Status	Reference number
silicon dioxide	≤10	Listed	-

Mutagen

None of the components are listed.

Corrosive liquid : Not listed

15. Regulatory information

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 : Not applicable.

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Polycondensate of 4,4'-isopropylidenediphenol and 1-chloro-2,3-epoxypropane (liquid only)	≤10	Priority assessment	87
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Xylene	≤10	Priority assessment	125
Phenol	≤10	Priority assessment	62
Cumene	≤10	Priority assessment	126
Ethylbenzene	≤10	Priority assessment	50
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Naphthalene	≤10	Priority assessment	76
1-Butanol	≤10	Priority assessment	124
alpha-(Nonylphenyl)-omega-hydroxypoly(oxyethylene)	≤10	Priority assessment	86
2,6-Di-tert-butyl-4-methylphenol	≤10	Priority assessment	64
alpha-Alkyl(C9-11)-omega-hydroxypoly(oxyethylene) (It is limited that a number-average molecular weight of the polymer is less than 1,000.)	≤10	Priority assessment	188
Epichlorohydrin	≤10	Priority assessment	22

High Pressure Gas Control Law : Not available.

Explosives Control Law

None of the components are listed.

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

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

15. Regulatory information

None of the components are listed.

Container class

None of the components are listed.

JSOH Carcinogen : Group 2B

List of Specially Controlled Industrial Waste : Not listed

Japan inventory : At least one component is not listed.

Road law : Not available.

16. Other information

History

Date of issue/Date of revision : 12 June 2024

Date of previous issue : 1/31/2024

Version : 19

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, 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.