AkzoNobel

SAFETY DATA SHEET

F69 BASE GREY BAC 707 - M9001

In accordance with the Standard for Classification and Labeling of Chemical Substance and Safety Data Sheet, Article 10 Paragraph 1

Section 1. Chemical product and company identification

A. Product name : F69 BASE GREY BAC 707 - M9001

SDS code : 21069000B

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

Identified uses
Paint. Professional use Industrial use

Uses advised against
All other uses

Product use : Two component coating for interior use.

C. Supplier's details

MAPAERO SAS
10, Avenue de la Rijole CS30098
09103 PAMIERS Cedex
France

e-mail address of person responsible for this SDS : PSRA_PAMIERS@akzonobel.com

Emergency telephone number (with hours of operation) : +33 (0)5 34 01 34 01
+33 (0)5 61 60 23 30

Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
AQUATIC HAZARD (LONG-TERM) - Category 2

This product is classified in accordance with the Industrial Safety and Health Act and the Chemical Control Act.

B. GHS label elements, including precautionary statements

Symbol :

Section 2. Hazards identification

Signal word : Warning

Hazard statements : H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : P280 - Wear protective gloves. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P261 - Avoid breathing vapor.
P264 - Wash hands thoroughly after handling.

Response : P391 - Collect spillage.
P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

C. Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	Common name	Identifiers	%
titanium dioxide	Titanium dioxide	CAS: 13463-67-7	≥30 - ≤35
butan-2-ol	butan-2-ol	CAS: 78-92-2	≥20 - ≤25
Terphenyl, hydrogenated	terphenyl, hydrogenated	CAS: 61788-32-7	≤5
zinc oxide	zinc oxide	CAS: 1314-13-2	≤5
Talc , not containing asbestiform fibres	talc (non-asbestos form)	CAS: 14807-96-6	≤5
Amines, polyethylenepoly-, triethylenetetramine fraction	Triethylenetetramine	CAS: 90640-67-8	≤5
aluminium hydroxide	aluminum hydroxide	CAS: 21645-51-2	≤5
propylidynetrimethanol	2-Ethyl-2-hydroxymethyl-1,3-propanediol	CAS: 77-99-6	≤5
lead monoxide	Lead Monoxide	CAS: 1317-36-8	≤5
cadmium oxide	CADMIUM OXIDE	CAS: 1306-19-0	≤5

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.

Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

A. Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

B. Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

C. Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

D. Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

E. 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

A. Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

B. 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.

Section 5. Fire-fighting measures

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

C. 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.

Special precautions 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.

Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures : 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.

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

C. Methods and materials for containment and cleaning up

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

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

Section 7. Handling and storage

A. Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.

Section 7. Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

B. Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

A. Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
butan-2-ol	**Ministry of Employment and Labor (Republic of Korea, 1/2020).** STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Terphenyl, hydrogenated	**Ministry of Employment and Labor (Republic of Korea, 1/2020). [Hydrogenated terphenyls]** TWA: 0.5 ppm 8 hours.
lead monoxide	**Ministry of Employment and Labor (Republic of Korea, 1/2020). [Lead and Inorganic compounds] Notes: as Pb** TWA: 0.05 mg/m³, (as Pb) 8 hours. Form: Dust and fumes
cadmium oxide	**Ministry of Employment and Labor (Republic of Korea, 1/2020). [Cadmium and compounds]** TWA: 0.002 mg/m³, (as Cd) 8 hours. Form: Respirable fraction TWA: 0.01 mg/m³, (as Cd) 8 hours.

B. 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.

C. Personal protective equipment

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 8. Exposure controls/personal protection

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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.

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.

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

A. Appearance

Physical state : Liquid.

Color : Gray.

B. Odor : Characteristic.

C. Odor threshold : Not available.

D. pH : Not available. [DIN EN 1262]

E. Melting/freezing point : Not available.

F. Boiling point, initial boiling point, and boiling range : Not available.

G. Flash point : Closed cup: 25°C (77°F) [Pensky-Martens]

H. Evaporation rate : Not available.

I. Flammability (solid, gas) : Not available.

J. Lower and upper explosive (flammable) limits : Not available.

K. Vapor pressure :

	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
butan-2-ol	12.75	1.7				
octamethylcyclotetrasiloxane	0.99	0.13				
decamethylcyclopentasiloxane	0.25	0.033				
propane-1,2-diol	0.15	0.02	EU A.4			
aluminium hydroxide	<0.075	<0.01				
2,4,6-tris(dimethylaminomethyl) phenol	0.056	0.0075	EU A.4			

Section 9. Physical and chemical properties

polyethylenepolyamines, triethylenetetramine fraction	0.0026	0.00035	OECD 104			
triphenyl phosphite	0.00052	0.000069	EU A.4			
Terphenyl, hydrogenated	0	0	EPA OPPTS 830.7950			
Volatile, harmless liquid, n.o.s.	0	0				
propylidynetrimethanol	0	0				
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	0	0	EU A.4			

L. Solubility(ies) :

Media	Result
cold water	Not soluble [OESO (TG 105)]

Solubility in water : Not available.

M. Vapor density :

N. Density : 1.511 g/cm³ [DIN EN ISO 2811-1]

O. Partition coefficient: n-octanol/water : Not applicable.

P. Auto-ignition temperature :

Ingredient name	°C	°F	Method
Naphtha (petroleum), hydrodesulfurized heavy	280 to 470	536 to 878	
Solvent naphtha (petroleum), light arom.	280 to 470	536 to 878	
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	356	672.8	EU A.16
propane-1,2-diol	371	699.8	
decamethylcyclopentasiloxane	372	701.6	ASTM E 659-78
Terphenyl, hydrogenated	374	705.2	
butan-2-ol	377	710.6	
2,4,6-tris(dimethylaminomethyl)phenol	382	719.6	EU A.15
octamethylcyclotetrasiloxane	384 to 387	723.2 to 728.6	ASTM E 659
triphenyl phosphite	>400	>752	EU A.15

Q. Decomposition temperature : Not available.

R. Viscosity : Kinematic (room temperature): 364 mm^2/s (364 cSt) [DIN EN ISO 3219]
Kinematic (40°C (104°F)): 101 mm^2/s (101 cSt) [DIN EN ISO 3219]

S. Molecular weight : Not applicable.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

A. Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

B. Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Section 10. Stability and reactivity

C. Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

D. Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

A. Information on the likely routes of exposure : Not available.

Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Skin contact : Causes skin irritation.

Eye contact : Causes serious eye irritation.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Ingestion : No specific data.

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

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

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
butan-2-ol	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	48500 mg/m³	4 hours
	LD50 Intraperitoneal	Guinea pig	1067 mg/kg	-
	LD50 Intraperitoneal	Mouse	771 mg/kg	-
	LD50 Intraperitoneal	Rabbit	277 mg/kg	-
	LD50 Intraperitoneal	Rat	1193 mg/kg	-
	LD50 Intravenous	Mouse	764 mg/kg	-
	LD50 Intravenous	Rat	138 mg/kg	-
	LD50 Oral	Rabbit	4893 mg/kg	-
	LD50 Oral	Rabbit	4890 mg/kg	-
	LD50 Oral	Rat	2193 mg/kg	-
	LD50 Oral	Rat	2054 mg/kg	-
Terphenyl, hydrogenated	LD50 Oral	Mouse	12500 mg/kg	-
	LD50 Oral	Rat	17500 mg/kg	-
	LD50 Oral	Rat	>24000 mg/kg	-
	LD50 Oral	Rat	>10000 mg/kg	-
zinc oxide	LD50 Intraperitoneal	Rat	240 mg/kg	-
	LD50 Oral	Mouse	7950 mg/kg	-

Section 11. Toxicological information

propylidynetrimethanol	LD50 Oral	Mouse	13700 mg/kg	-
	LD50 Oral	Mouse	14000 mg/kg	-
	LD50 Oral	Rat	14100 mg/kg	-
	LD50 Oral	Rat	14000 mg/kg	-
lead monoxide	LD50 Intraperitoneal	Mouse	217 mg/kg	-
cadmium oxide	LC50 Inhalation Vapor	Guinea pig	3500 mg/m³	10 minutes
	LC50 Inhalation Vapor	Mouse	250 mg/m³	2 hours
	LC50 Inhalation Vapor	Rabbit	2500 mg/m³	10 minutes
	LC50 Inhalation Vapor	Rat	45 mg/m³	1 hours
	LD50 Intraperitoneal	Rat	12 mg/kg	-
	LD50 Intravenous	Rat	25 mg/kg	-
	LD50 Oral	Mouse	67 mg/kg	-
	LD50 Oral	Rat	72 mg/kg	-
	LD50 Subcutaneous	Mouse	94 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
butan-2-ol	Eyes - Severe irritant	Rabbit	-	0.1 Ml	-
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
lead monoxide	Skin - Mild irritant	Rabbit	-	24 hours 100 mg	-

Sensitization

Not available.

CMR - ISHA Article 42 Occupational Exposure Limits

Product/ingredient name	Identifiers	Classification
titanium dioxide	CAS: 13463-67-7	CARCINOGENICITY - Category 2
lead monoxide	CAS: 1317-36-8	CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 1A
cadmium oxide	CAS: 1306-19-0	GERM CELL MUTAGENICITY - Category 2 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 2

Mutagenicity

Product/ingredient name	Test	Experiment	Result
cadmium oxide	-	Subject: Mammalian-Animal	Positive

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH
titanium dioxide	-	2B	-	A4
Talc , not containing asbestiform fibres	-	3	-	A4
aluminium hydroxide	-	-	-	A4
lead monoxide	-	2A	Reasonably anticipated to be a human carcinogen.	A3
cadmium oxide	+	1	Known to be a human carcinogen.	A2

Reproductive toxicity

Not available.

Section 11. Toxicological information

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
butan-2-ol	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
lead monoxide cadmium oxide	Category 2 Category 1	- -	- -

Aspiration hazard

Not available.

Potential chronic health effects

Chronic toxicity

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute EC50 19.3 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 27.8 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 35.306 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 13.4 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 11 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 3.6 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 15.9 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 13 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
	Acute LC50 >1000 mg/l Fresh water	Fish - Pimephales promelas	96 hours
butan-2-ol	Acute EC50 4227 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 3670000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
zinc oxide	Acute EC50 1 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours

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	Acute EC50 0.622 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.25 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 3.969 mg/l Fresh water	Fish - Danio rerio - Adult	96 hours
	Acute LC50 2.525 mg/l Fresh water	Fish - Danio rerio - Adult	96 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 2246000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
propylidynetrimethanol	Acute EC50 13000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 14400000 µg/l Marine water	Fish - Cyprinodon variegatus	96 hours
lead monoxide	Acute LC50 388000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 132 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 3486000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 298 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 3562000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 3841000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 3963000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
cadmium oxide	Acute LC50 3280 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 0.0054 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 9350 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 177 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 7029 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 9920 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Acute LC50 10470 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours

B. Persistence and degradability

Not available.

C. Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
butan-2-ol	0.61	-	low
Terphenyl, hydrogenated	-	5200	high
zinc oxide	-	28960	high
Amines, polyethylenepoly-, triethylenetetramine fraction	-2.65	-	low
propylidynetrimethanol	-0.47	<1	low
cadmium oxide	-	1345	high

Section 12. Ecological information

D. Mobility in soil

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

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

Section 13. Disposal considerations

A. 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.

B. Disposal precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
A. UN number	UN1263	UN1263	UN1263
B. UN proper shipping name	PAINT	PAINT	PAINT
C. Transport hazard class(es)	3 	3 	3 
D. Packing group	III	III	III
E. Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Marine Pollutant(s): Terphenyl, hydrogenated, zinc oxide	Yes. The environmentally hazardous substance mark is not required.

Additional information

UN : **Viscous liquid exception** This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.2.

IMDG : **Emergency schedules** F-E, _S-E_
Viscous liquid exception This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.
IMDG Code Segregation group Not applicable

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Section 14. Transport information

F. 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 to IMO instruments : Not available.

Section 15. Regulatory information

A. Regulation according to ISHA

ISHA article 117 (Harmful substances prohibited from manufacture) : None of the components are listed.

ISHA article 118 (Harmful substances requiring permission) : None of the components are listed.

Article 2 of Youth Protection Act on Substances Hazardous to Youth : Not applicable.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:
butan-2-ol
Terphenyl, hydrogenated
lead monoxide
cadmium oxide

ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors) : The following components are listed: Lead and its inorganic compounds, Cadmium and its compounds

ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement) : The following components are listed: titanium dioxide, 2-butanol, zinc oxide, talc / soapstone, aluminum and its compounds

ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check-up) : The following components are listed: 2-Butanol, Zinc oxide, Aluminum and its compounds

Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control) : The following components are listed: titanium dioxide, 2-butanol, zinc and its compounds, aluminum and its compounds

B. Regulation according to Chemicals Control Act

Article 11 (TRI) : The following components are listed: Zinc and its compounds, Aluminium and its compounds

Article 18 Prohibited (K-Reach Article 27) : None of the components are listed.

Article 19 Subject to authorization (K-Reach Article 25) : None of the components are listed.

Section 15. Regulatory information

Article 20 Toxic Chemicals (K-Reach Article 20) : Not applicable

Article 20 Restricted (K-Reach Article 27) : None of the components are listed.

Article 39 (Accident Precaution Chemicals) : None of the components are listed.

Existing Chemical Substances Subject to Registration : The following components are listed: Zinc oxide, Quartz, Lead monoxide, Cadimium oxide, Triphenyl phosphite

C. Dangerous Materials Safety Management Act : **Class:** Class 4 - Flammable Liquid
Item: 4. Class 2 petroleums - Water-insoluble liquid
Threshold: 1000 L
Danger category: III
Signal word: Contact with sources of ignition prohibited

D. Wastes regulation : Dispose of contents and container in accordance with all local, regional, national and international regulations.

E. Regulation according to other foreign laws

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

A. References : - Registry of Toxic Effects of Chemical Substances
- United States Environmental Protection Agency ECOTOX

B. Date of issue/Date of revision : 9 December 2022

C. Version : 2

Unique ID :

Date of printing : **9 December 2022**

D. Other

Indicates information that has changed from previously issued version.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
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)
N/A = Not available

Section 16. Other information

SGG = Segregation Group
UN = United Nations

Notice to reader

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