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Issue Date: 21-May-2013	Revision Date: 29-June-2024	Version 2
	1. IDENTIFICATION	
Product identifier		
Product Name	PC CONCRETE EPOXY, PART B	
	FC CONCRETE EFOAT, FART B	
Other means of identification		
SDS #	130521-38B-CA	
Synonyms	None	
UN/ID No	UN3263	
Recommended use of the chemic	al and restrictions on use	
Recommended Use	Adhesives	
Uses Advised Against	No information available	
Details of the supplier of the safet	v data sheet	
Initial supplier identifier Acklands Grainger Inc	Manufacturer Address	
123 Commerce Valley Dr East, Suite	Protective Coatings Co. 200 221 S Third St.	
Thornhill, ON L3T7W8	Allentown, PA 18102 USA	
Phone: 1-888-602-0000	610-432-3543 / 800-220-2103	
Emergency telephone number		
Emergency Telephone	INFOTRAC 1-352-323-3500 (International)	
	1-800-535-5053 (North America)	
	2. HAZARDS IDENTIFICATIO	N
Appearance Gray paste	Physical state Solid	Odour Amine-like
<u>Classification</u>		
Acute toxicity - Oral		Category 4
Skin corrosion/irritation		Category 1 Sub-category B
Serious eye damage/eye irritation		Category 1
Skin sensitisation		Category 1
Reproductive toxicity		Category 2
<u>Signal word</u> Danger		

Hazard statements

Harmful if swallowed Causes severe skin burns and eye damage May cause an allergic skin reaction Suspected of damaging fertility or the unborn child



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/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapours/spray Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention Immediately call a POISON CENTRE or doctor Immediately call a POISON CENTRE or doctor IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower] Wash contaminated clothing before reuse IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Take off all contaminated clothing and wash it before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTRE or doctor IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell Rinse mouth IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Very toxic to aquatic life with long lasting effects

Unknown acute toxicity

NOTE: Acute Toxicity classifications are approximates, due to proprietary ingredient percentages.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Limestone	1317-65-3	65-85	-	-
Nonyl phenol	84852-15-3	10-30	-	-
1-(2-Aminoethyl) piperazine	140-31-8	10-30	-	-
2-methyl-1,5-pentamethylenediamine	15520-10-2	1-5	-	-
Silica, Quartz	14808-60-7	1-5	-	-
Proprietary Ingredients	PROPRIETAR Y	Proprietary	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures			
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.		
Skin contact	Wash with soap and water. Remove and wash contaminated clothing before reuse. Call a POISON CENTRE/doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention.		
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.		
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Immediate medical attention is required.		
Most important symptoms and effe	Most important symptoms and effects, both acute and delayed		
Symptoms	Causes severe skin burns and eye damage. Ingestion may cause severe burns to mouth, throat or stomach. May cause an allergic skin reaction. Harmful if swallowed.		
Indication of any immediate medica	al attention and special treatment needed		
Note to doctors	Skin and eye conditions may be aggravated by long term exposure.		
	5. FIREFIGHTING MEASURES		
Suitable Extinguishing Media	Dry chemical, CO2 or water spray.		
Unsuitable extinguishing media	Not determined.		
Specific hazards arising from the chemical	No information available.		
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Nitrogen oxides (NOx).		

Explosion Data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.	
Special protective equipment for fire-fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways. NFPA Class IIIB.	
	6. ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective ec	uipment and emergency procedures	
Personal precautions	Wear protective gloves/protective clothing and eye/face protection. Remove any contaminated clothing and wash thoroughly before reuse.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Dispose of contents/container to an approved waste disposal plant.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
	7. HANDLING AND STORAGE	
Precautions for safe handling		
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wear appropriate personal protective equipment. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8.	
Conditions for safe storage, includi	ng any incompatibilities	

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.
Incompatible materials	Strong acids, peroxides, and other oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Limestone 1317-65-3	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³ STEL: 20 mg/m ³		TWA: 10 mg/m ³

Silica, Quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
Other Information	existing respi generate silic	If product is sanded, appropriate respirator should be worn to avoid breathing dust. Pre- existing respiratory disorders may be aggravated by exposure. If sanded, this material may generate silica dust. Inhaled silica has been classified by IARC as a human carcinogen (see section 11).		
Appropriate engineering	<u>controls</u>			
Engineering controls	Provide gene	eral or local exhaust ventila	tion if product is sanded or	r ground.
Individual protection measures, such as personal protective equipment				
Eye/face protection	Wear protect	ive eyeglasses or chemica	l safety goggles.	
Skin and body protection	N Wear protect	ive gloves and protective c	lothing.	
Respiratory protection	maintain airb	uate ventilation, especially orne concentrations below pirator must be worn.		
General hygiene conside	eating, drinki	t with skin, eyes and clothi ng, or smoking. If contact o action shown on section 4	occurs, remove contaminat	ted clothing. If needed,

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

information on basic physical and c		
Physical state	Solid	
Appearance	Gray paste	
Colour	Gray	
Odour	Amine-like	
Odour Threshold	Not determined	
Property_	<u>Values</u>	Remarks • Method
pH	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling	No data available	
range		
Flash point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive	No data available	
limits		
Vapour Pressure	Not determined	
Vapour Density	No data available	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Decomposition temperature	Not determined	
Kinematic Viscosity	Not determined	

Dynamic Viscosity	Not determined
Explosive properties	Not determined.
Oxidising properties	Not determined.
Other information Softening Point Molecular weight VOC content Liquid Density Bulk density	Not determined Not determined No data available Not determined Not determined

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous Polymerisation	Hazardous polymerisation does not occur.
Conditions to Avoid	Keep out of reach of children.
Incompatible materials	Strong acids, peroxides, and other oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information		
Eye contact	Causes severe eye damage.	
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.	
Inhalation	May cause irritation.	
Ingestion	Ingestion may cause irritation to mucous membranes.	
Symptoms related to the physical, chemical and toxicological characteristics		
Symptoms	Please see section 4 of this SDS for symptoms.	
Acute toxicity		
The following values are calculated ATEmix (oral) mg/kg	d based on chapter 3.1 of the GHS document 402.40	
Unknown acute toxicity	NOTE: Acute Toxicity classifications are approximates, due to proprietary ingredient percentages.	

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nonyl phenol 84852-15-3	= 1300 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	-
1-(2-Aminoethyl) piperazine 140-31-8	= 2140 µL/kg (Rat)	= 866 mg/kg (Rabbit)	-
2-methyl-1,5- pentamethylenediamine 15520-10-2	= 1690 mg/kg (Rat)	-	= 4.1 mg/L (Rat)1 h = 2.9 mg/L (Rat)1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitisation Carcinogenicity

May cause an allergic skin reaction. Silica (quartz) is a possible carcinogen when it appears as a respirable dust.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Silica, Quartz	A2	Group 1	Known	Х
14808-60-7				

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labour) X - Present

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Nonyl phenol 84852-15-3	EC50: 0.36 - 0.48mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.16 - 0.72mg/L (72h, Pseudokirchneriella subcapitata) EC50: =1.3mg/L (72h, Desmodesmus subspicatus)	LC50: =0.135mg/L (96h, Pimephales promelas) LC50: =0.1351mg/L (96h, Lepomis macrochirus)	-	EC50: =0.14mg/L (48h, Daphnia magna)
1-(2-Aminoethyl) piperazine 140-31-8	EC50: =495mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 1950 - 2460mg/L (96h, Pimephales promelas) LC50: >1000mg/L (96h, Poecilia reticulata) LC50: >=100mg/L (96h, Oncorhynchus mykiss)	EC50 > 10000 mg/L 17 h	EC50: =32mg/L (48h, Daphnia magna)

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility

Component Information

Component Information		
Chemical name		Partition coefficient
Nonyl phenol 84852-15-3		5.4
1-(2-Aminoethyl) piperazine		-1.48
140-31-6		1.10
2-methyl-1,5-pentamet 15520-10	•	1
Other adverse effects	No information available.	
	13. DISPOSAL C	ONSIDERATIONS
Waste Treatment Methods		
Waste from residues/unused products	Dispose of in accordance environmental legislation.	with local regulations. Dispose of waste in accordance with
Contaminated packaging	Do not reuse empty conta	iners.
	14. TRANSPOR	FINFORMATION
Note	Please see current shippir exemptions and special ci	ng paper for most up to date shipping information, including rcumstances
DOT UN/ID No Proper Shipping Name Transport hazard class(es) Packing Group	UN3263 Corrosive solid, basic, org diamine) 8 III	anic n.o.s.(4-nonylphenol, branched,2-methylpentane-1,5-
TDG UN/ID No Proper Shipping Name Transport hazard class(es) Packing Group	UN3263 Corrosive solid, basic, org diamine) 8 III	anic n.o.s.(4-nonylphenol, branched,2-methylpentane-1,5-
IATA UN number or ID number Proper Shipping Name Transport hazard class(es) Packing group	UN3263 Corrosive solid, basic, org diamine) 8 III	anic n.o.s.(4-nonylphenol, branched,2-methylpentane-1,5-
IMDG UN number or ID number Proper Shipping Name Transport hazard class(es) Packing Group Marine Pollutant	UN3263 Corrosive solid, basic, org diamine) 8 III Yes	anic n.o.s.(4-nonylphenol, branched,2-methylpentane-1,5-

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS) Not applicable

The Stockholm Convention on	Not applicable
Persistent Organic Pollutants	

The Rotterdam Convention Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AIIC
Limestone	Х	Х	Х	Х	Х	Х	Х	Х
Nonyl phenol	Х	Х	Х	Х	Х	Х	Х	Х
1-(2-Aminoethyl) piperazine	Х	X	Х	Х	X	Х	X	X
2-methyl-1,5- pentamethylenedia mine	Х	X	X	Х	X	Х	X	Х
Silica, Quartz	Х	Х	X	X	X	Х	X	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Special hazards -

Personal Protection B

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

	h hazards 3 Flammability 1 h hazards 3 * Flammability 1	Instability 0 Physical hazards 0
Chronic Hazard Star Legend	* = Chronic Health Hazard	
Legend Section 8: EXPOSURI TWA STEL Ceiling *	E CONTROLS/PERSONAL PROTECTION TWA (time-weighted average) STEL (Short Term Exposure Limit) Maximum limit value Skin designation	l
Revision Date:	29-June-2024	

Revision Note: Regulatory review.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



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Issue Date: 21-May-2013	Revision Date: 29-June-2024	Version 1
	1. IDENTIFICATIO	N
Product identifier		
Product Name	PC CONCRETE EPOXY, PART A	
Other means of identification		
SDS #	130521-37B-CA	
Synonyms	None	
Recommended use of the chemic	al and restrictions on use	
Recommended Use	Adhesives	
Uses Advised Against	No information available	
Details of the supplier of the safe	ty data sheet	
Initial supplier identifier Acklands Grainger Inc 123 Commerce Valley Dr East, Suit Thornhill, ON L3T7W8 Phone: 1-888-602-0000	Manufacturer Address Protective Coatings Co. 221 S Third St. Allentown, PA 18102 USA 610-432-3543 / 800-220-2103	
Emergency telephone number		
Emergency Telephone	INFOTRAC 1-352-323-3500 (Internation 1-800-535-5053 (North America)	onal)
	2. HAZARDS IDENTIFIC	ATION
Appearance White viscous paste Classification	Physical state Solid	Odour Slight
Skin corrosion/irritation Serious eye damage/eye irritation Skin sensitisation Germ cell mutagenicity		Category 2 Category 2 Category 1 Category 2
		· · · · ·

<u>Signal word</u> Warning

Hazard statements

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction Suspected of causing genetic defects



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/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapours/spray Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

If exposed or concerned: Get medical advice/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/attention IF ON SKIN: Wash with plenty of water and soap Take off all contaminated clothing and wash it before reuse If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Diglycidyl Ether of Bisphenol A	25085-99-8	30-60	-	-
Limestone	1317-65-3	30-60	-	-
1,4-Butanediol Diglycidyl Ether	2425-79-8	10-30	-	-
Titanium(IV) Oxide	13463-67-7	0.1-1.0	-	-
Oxirane, [(2-methylphenoxy)methyl]-	2210-79-9	0.1-1.0	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Provide this SDS to medical personnel for treatment. After first aid, get appropriate in-plant, paramedic, or community medical support.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash with soap and water. Remove and wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Remove stomach contents by medical personnel only. Immediate medical attention is required.
Most important symptoms and effe	ects, both acute and delayed
Symptoms	Causes eye irritation. Direct contact may cause temporary redness and discomfort. Causes skin irritation. May cause respiratory irritation. Ingestion may cause nausea, vomiting, dizziness, and headache. May cause an allergic skin reaction.
Indication of any immediate medic	al attention and special treatment needed
Note to doctors	Skin and eye conditions may be aggravated by long term exposure. Medical Conditions Aggravated by Long-Term Exposure: skin disorders and allergies and eye conditions.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Carbon dioxide (CO2). Dry chemical. Alcohol foam.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Ignition will give rise to a Class B fire. May generate toxic or irritating combustion products. May generate carbon monoxide gas.
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO2),
Explosion Data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.
Special protective equipment for fire-fighters	Keep containers cool with water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways. NFPA Class IIIB.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective gloves/protective clothing and eye/face protection. Remove any contaminated clothing and wash thoroughly before reuse.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containm	ent and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of liquid spill for later disposal.	
Methods for cleaning up	Collect and place in suitable, properly labeled container for recovery or disposal. Dispose of contents/container to an approved waste disposal plant. For waste disposal, see section 13 of the SDS.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
7. HANDLING AND STORAGE		

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing must not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store contents under <90F (32C). NFPA Class IIIB storage.
Incompatible materials	Strong acids, peroxides, and other oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Limestone 1317-65-3	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³ STEL: 20 mg/m ³		TWA: 10 mg/m ³
Titanium(IV) Oxide 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³

Other Information	If product is sanded, appropriate respirator should be worn to avoid breathing dust. Pre- existing respiratory disorders may be aggravated by exposure. If sanded, this material ma generate silica / titanium dust. Inhaled silica / titanium has been classified by IARC as a human carcinogen (see section 11).	
Appropriate engineering controls		
Engineering controls	Provide general or local exhaust ventilation systems if possible. Maintain eye wash fountain and quick-drench facilities in work area.	
Individual protection measures, suc	h as personal protective equipment	
Eye/face protection	Chemical safety goggles/faceshield.	
Skin and body protection	Wear chemically protective gloves to prevent skin contact. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.	
Respiratory protection	None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.	
General hygiene considerations	Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid	
Appearance	White viscous paste	
Colour	White	
Odour	Slight	
Odour Threshold	Not determined	
Property_	<u>Values</u>	Remarks • Method
рН	> / = 2.0 - < / = 12.0	
Melting point / freezing point	No data available	
Initial boiling point and boiling	No data available	
range		
Flash point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	Not available	
Lower flammability or explosive limits	Not available	
Vapour Pressure	Not determined	
Vapour Density	No data available	
Relative Density	1.4	@ 60°F (ASTM D 1298)
Water Solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Decomposition temperature	Not determined	
Kinematic Viscosity	Not determined	

Dynamic Viscosity	Not determined
Explosive properties	Not determined.
Oxidising properties	Not determined.
Other information Softening Point Molecular weight VOC content Liquid Density Bulk density	Not determined Not determined No data available Not determined Not determined

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous Polymerisation	Hazardous polymerisation does not occur.
Conditions to Avoid	Keep out of reach of children.
Incompatible materials	Strong acids, peroxides, and other oxidizing agents.

Hazardous decomposition products Thermal oxidative decomposition can produce CO, CO2 in a fire.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May cause nausea, vomiting, stomach ache, and diarrhea.
Symptoms related to the physical,	chemical and toxicological characteristics
Symptoms	Please see section 4 of this SDS for symptoms.
Acute toxicity	
The following values are calculated ATEmix (oral) mg/kg	l based on chapter 3.1 of the GHS document 7,560.00
ATEmix (dermal)	7,333.30
ATEmix (inhalation-dust/mist) mg/L	10.00

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,4-Butanediol Diglycidyl Ether 2425-79-8	= 1134 mg/kg (Rat)	> 2150 mg/kg (Rat)	-
Titanium(IV) Oxide	> 10000 mg/kg (Rat)	-	= 5.09 mg/L (Rat) 4 h
13463-67-7	5 5 7,		
Oxirane, [(2-	= 4 g/kg (Rat)	> 2200 mg/kg (Rabbit)	> 6.1 ppm (Rat)4 h
methylphenoxy)methyl]- 2210-79-9			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity May cause an allergic skin reaction.

Suspected of causing genetic defects.

Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium(IV) Oxide 13463-67-7	A3	Group 2B	-	Х
13463-67-7				

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labour)

X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Oxirane, [(2-	-	LC50: 2.8 - 5.1mg/L (96h,	-	-
methylphenoxy)methyl]-		Oncorhynchus mykiss)		
2210-79-9				

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility

Chemical name	Partition coefficient
1,4-Butanediol Diglycidyl Ether 2425-79-8	-0.269
Oxirane, [(2-methylphenoxy)methyl]- 2210-79-9	2.5

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.			
Contaminated packaging	Do not reuse empty containers.			
14. TRANSPORT INFORMATION				
Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances			
DOT	Not regulated			
TDG_	Not regulated			
UN number or ID number Proper Shipping Name Transport hazard class(es) Packing group	UN3077 Environmentally hazardous substance, solid, n.o.s (Oxirane,[(2-methylphenoxy)methyl]-) 9 III			
UN number or ID number Proper Shipping Name Transport hazard class(es) Packing Group Marine Pollutant	UN3077 Environmentally hazardous substance, solid, n.o.s (Oxirane,[(2-methylphenoxy)methyl]-) 9 III Yes			

Waste Treatment Methods

REGULATORY INFORMATION

15. REGULATORY INFORMATION

International Regulations

Ozone-depleting substan	ces (ODS) Not applicable
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The Stockholm Convention on	Not applicable
Persistent Organic Pollutants	

The Rotterdam Convention Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AIIC
Diglycidyl Ether of Bisphenol A	Х	Х			X	Х	X	Х
Limestone	Х	Х	Х	Х	Х	Х	Х	Х
1,4-Butanediol Diglycidyl Ether	Х	X	Х	Х	Х	Х	X	Х
Titanium(IV) Oxide	Х	Х	Х	Х	Х	Х	Х	Х
Oxirane, [(2- methylphenoxy)met hyl]-	х	X	Х	Х	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Special hazards -

Personal Protection B-Safety Glasses, Gloves

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA HMIS	Health hazards 2 Health hazards 2 *	Flammability 1 Flammability 1	Instability 0 Physical hazards 0
Chronic Hazard Star Lege	nd *= Chronic	Health Hazard	
Legend Section 8: EXF TWA STEL Ceiling *	(-weighted average) rt Term Exposure Limit) imit value	I
Revision Date:	29-June-20)24	
Revision Note:	New formu	la.	

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet