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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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| <i>I</i> [™] | |

| 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 |
|--------------------------------|--------------------------|
|--------------------------------|--------------------------|

| 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