SAFETY DATA SHEET

SDS: 0076541
Date Prepared: 06/12/2024

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: **AQUAKEM 8LTR KIT**
Sample Identification: AQUAKEM B
SDS ID: 0062814
AQUAKEM A
SDS ID: 0062402

Intended/Recommended Use: Surface coating
Uses advised against: Not available

Bondlast Construction Products.
24-28 Lady Ruby Drive, East Tamaki, Auckland 2013, New Zealand

For Product and all Non-Emergency Information call +64 (09) 267 2772 (business hours only) or contact us at https://www.dglbondlast.co.nz/contact/

EMERGENCY TELEPHONE NUMBER
Poisons Information Centre, New Zealand: 0800 764 766

SAFETY DATA SHEET

SDS: 0062814
Date Prepared: 6-Dec-2024

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: **AQUAKEM B**
Product Description: Epoxy resins
Intended/Recommended Use: Recommended for Industrial and/or Professional use only
Uses advised against: Not available

Bondlast Construction Products.
24-28 Lady Ruby Drive, East Tamaki, Auckland 2013, New Zealand

For Product and all Non-Emergency Information call +64 (09) 267 2772 (business hours only) or contact us at https://www.dglbondlast.co.nz/contact/

EMERGENCY TELEPHONE NUMBER
Poisons Information Centre, New Zealand: 0800 764 766

2. HAZARDS IDENTIFICATION

Regulatory information
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2020

EPA New Zealand HSNO approval code or group standard: HSR002503

Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

GHS Classification
Germ Cell Mutagenicity Category 2
Skin Irritation Category 2
Serious Eye Damage / Eye Irritation Category 2
Skin Sensitizer Category 1A
Hazardous to the Aquatic Environment Chronic Category 2

LABEL ELEMENTS

Signal Word
Warning

Hazard Statements
Suspected of causing genetic defects
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves. Wear protective eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response
IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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.

OTHER HAZARDS
Not applicable

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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Mixture

Component / CAS No.	**%**
Limestone (calcium carbonate - not classified) 1317-65-3	25-30
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) 25068-38-6	25-30
o-Cresol glycidyl ether 2210-79-9	1-3
5-Chloro-2-methyl-3(2H)-isothiazolone, mixt. with 2-methyl-3(2H)-isothiazolone 55965-84-9	<0.005

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4. FIRST-AID MEASURES

Emergency telephone number
Poisons Information Centre, New Zealand: 0800 764 766

First-aid Measures

Inhalation:
Remove to fresh air. Get medical attention immediately if symptoms occur.

Skin Contact:
Wash immediately with plenty of water and soap. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Get medical attention if irritation develops and persists. Wash off immediately with soap and plenty of water for at least 15 minutes.

Eye Contact:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

Ingestion:
Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Most Important Symptoms and Effects, Acute and Delayed
Itching. Rashes. Hives. Burning sensation.

Immediate Medical Attention and Special Treatment
Notes To Physician:
May cause sensitisation in susceptible persons. Treat symptomatically.

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media:
full water jet.

Protective Equipment:
Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Special Hazards:
Some may burn but none ignite readily. Some may be transported hot. In case of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapours. Product is or contains a sensitiser. May cause sensitization by skin contact.

HAZCHEM Code: •3Z

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods For Containment:
Prevent further leakage or spillage if safe to do so.

Methods For Cleaning Up:
Take up mechanically, placing in appropriate containers for disposal.

Environmental Precautions:
Avoid release to the environment.

References to other sections:
See Sections 7, 8 and 13 for additional information.

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7. HANDLING AND STORAGE

Handling

Precautions: 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. Wear protective gloves. Wear protective eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Special Handling Statements: Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Remove contaminated clothing and shoes without delay.

Storage
Keep container tightly closed and dry in a cool, well-ventilated place. Store locked up. Keep out of reach of children. Keep from freezing.

Storage Temperature: Ambient temperature
Reason: Quality.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS - Limits

Limestone (calcium carbonate - not classified) 1317-65-3

New Zealand:	10 mg/m^3	(TWA)

Biological Exposure Limit(s)

No values have been established.

Engineering Measures:
Ensure adequate ventilation, especially in confined areas.

Respiratory Protection:
Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Where exposures are below the established exposure limit, no respiratory protection is required. Where respiratory protection is required, use a respirator selected and in accordance with AS/NZS 1715 and AS/NZS 1716.

Eye protection:
Tight sealing safety goggles. Face protection shield.

Skin Protection:
Wear suitable protective clothing. Apron. Gloves made of plastic or rubber.

Hand protection:
Wear protective gloves. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

Additional Advice:
When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	paste liquid cream
Colour:	cream
Odor:	slight
Odor Threshold:	See Section 8 for exposure limits.
Melting Point:	Not available
Boiling Point:	100 °C (based on components)
Flammability:	Not available
Flammable Limits (% By Vol):	Not available
Flash point:	> 100 °C
Autoignition temperature:	Not available
Decomposition Temperature:	Not available
pH:	Not available
Viscosity (Kinematic):	Not applicable
Viscosity (Dynamic):	~ 4500 - 7000 mPa.s @ 25 °C
Solubility In Water:	dispersible
Solubility In Solvent:	Not available
Partition coefficient (n-octanol/water):	Not available
Vapor Pressure:	Not available
Specific Gravity/Density:	~ 1.26 - 1.28 g/cm³
Vapour density:	Not available
Particle characteristics:	Not applicable

9.2 OTHER INFORMATION

9.2.1 Information with regard to physical hazard classes
Not applicable

9.2.2 Other safety characteristics
Not applicable

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10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable

Conditions To Avoid: Protect from heat and direct sunlight.

Polymerization: Will not occur

Conditions To Avoid: None known.

Materials To Avoid: Strong oxidizing agents.
Strong acids
Strong bases

Hazardous Decomposition Products: None known

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11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin, Eyes, Oral.

HEALTH HAZARD INFORMATION

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - dermal: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - inhalation: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

Skin corrosion / irritation: Causes skin irritation
Serious eye damage / eye irritation: Causes serious eye irritation

Respiratory sensitization: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Skin sensitization: May cause an allergic skin reaction

Carcinogenicity: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Germ cell mutagenicity: Suspected of causing genetic defects
Reproductive toxicity: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Specific target organ toxicity (single exposure): Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.
Specific target organ toxicity (repeated exposure): Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

Aspiration hazard: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

PRODUCT TOXICITY INFORMATION

ACUTE TOXICITY DATA

oral	rat	Acute LD50			> 2000	mg/kg
dermal	rabbit	Acute LD50			> 2000	mg/kg
inhalation	rat	Acute LC50	4	hr	> 5	mg/l (Dust/Mist)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	Skin	Irritating
Acute Irritation	eye	Irritating

ALLERGIC SENSITIZATION

Sensitization	Skin	Severe Sensitizing
Sensitization	respiratory	No data

GENOTOXICITY

Assays for Gene Mutations

Ames Salmonella Assay	Contains a known or suspected mutagen

Chronic toxicity

Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

OTHER INFORMATION

The product toxicity information above has been estimated.

HAZARDOUS INGREDIENT TOXICITY DATA

Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700) has oral (rat) LD50 and dermal (rabbit) LD50 values of >5,000 mg/kg and >6,000 mg/kg, respectively. This material produced moderate eye and skin irritation in animal tests. It is a moderate skin sensitizer. No adverse effects were observed on embryonic or fetal development in animal teratology studies. A variety of mutagenicity tests produced mixed results. Two-year chronic studies (dermal and skin painting) in mice showed no increase in tumor incidence in two mouse strains. However, a third mouse strain showed a slight increase in tumors at a high dose. IARC concluded that this material is not classified as a carcinogen. Chronic ingestion caused reduced weight gain and death in laboratory animals. The oral (rat) LD50 and dermal (rabbit) LD50 values have also been reported to be 11.4 gm/kg and >20 ml/kg, respectively. The literature reports three cases of asthmatic symptoms developing in workers due to occupational exposure.

o-Cresyl glycidyl ether has an oral LD50 (rat) value of 2500 mg/kg and a dermal LD50 (rabbit) value of 2300 mg/kg. This material is irritating to eyes and skin. Liquid may cause skin sensitization. Inhalation of vapors may cause CNS depression and irritation to the nose, throat and respiratory tract.

3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone, CASRN 55965-84-9, has acute oral (rat) and dermal (rat) LD50 values of 64-66 mg/kg and 87.12 mg/kg respectively. In inhalation studies LC50 values of 0.33 and 0.171 mg/L (dust, mist) were found. Severe corrosive effects to the respiratory tract were considered as a possible root cause for the observed mortality.This material causes eye and skin burns and has a strong potential to cause sensitization by skin contact. Reproductive performance were not affected. In spite of the observed adverse maternal effects, treatment with CIT/MIT did not have any influence on the embryonic and fetal development.

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12. ECOLOGICAL INFORMATION

Aquatic Chronic Toxicity: Toxic to aquatic life with long lasting effects

The ecological assessment for this material is based on an evaluation of its components.

ECOTOXICITY

Not available

BIOACCUMULATIVE POTENTIAL
Not available

PERSISTENCE AND DEGRADABILITY
Not available

MOBILITY IN SOIL
Not available

OTHER ADVERSE EFFECTS

HAZARD TO THE OZONE LAYER
Not available

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) (25068-38-6)	LC50 3.6 mg/l - Rainbow Trout (Oncorhyncus mykiss) (96h)
o-Cresol glycidyl ether (2210-79-9)	LC50 2.8 - 5.1 mg/L - Oncorhynchus mykiss (96h)
5-Chloro-2-methyl-3(2H)-isothiazolone , mixt. with 2-methyl-3(2H)-isothiazolone (55965-84-9)	LC50 = 0.19 - 0.22 mg/L - Oncorhynchus mykiss - 96hrs LC50 = 0.09 mg/L - Oncorhynchus mykiss - 14d NOEC = 0.02 - 0.12 mg/L - Pimephales promelas - 36d

Component / CAS No.	Toxicity to Water Flea
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) (25068-38-6)	EC50 2.8 mg/l - Daphnia sp. (Other) (48h)
o-Cresol glycidyl ether (2210-79-9)	Not available
5-Chloro-2-methyl-3(2H)-isothiazolone , mixt. with 2-methyl-3(2H)-isothiazolone (55965-84-9)	EC50 = 0.10 - 0.16 mg/L - Daphnia magna - 48hrs NOEC = 0.0036 - 0.10 mg/L - Daphnia magna - 21d

Component / CAS No.	Toxicity to Algae
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) (25068-38-6)	EC50 <10 mg/l - Green Algae (Chlorella pyrenoidosa)
o-Cresol glycidyl ether (2210-79-9)	Not available
5-Chloro-2-methyl-3(2H)-isothiazolone , mixt. with 2-methyl-3(2H)-isothiazolone (55965-84-9)	EC50 = 0.0052 mg/L - Skeletonema costatum - 48hrs NOEC = 0.00049 mg/L - Skeletonema costatum - 48hrs

Component / CAS No.	Partition coefficient
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) (25068-38-6)	Not available
o-Cresol glycidyl ether (2210-79-9)	Not available
5-Chloro-2-methyl-3(2H)-isothiazolone , mixt. with 2-methyl-3(2H)-isothiazolone (55965-84-9)	log Kow = 2.52

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
The company encourages the recycle and reuse of products and packaging, where possible and permitted.

Product disposal
When recycle or reuse is not possible, the comany recommends that our products, especially when classified as hazardous, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

Packaging disposal
Handle contaminated packages in the same way as the product itself. Disposal of emptied and cleaned packaging must be made in accordance with applicable local and national regulations.

Disposal-relevant information
Do not release directly or indirectly to surface water, ground water, soil or public sewage system.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

Road transport

Dangerous Goods? X
PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class: 9

UN Number:	UN3082
Packing Group:	III
Transport Label Required:	Miscellaneous
TECHNICAL NAME (N.O.S.):	EPOXY RESIN(S), EPOXIDE DERIVATIVE
HAZCHEM Code:	•3Z
IERG:	47

IMO

Dangerous Goods? X

UN PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport Hazard Class:	9
UN Number:	UN3082
Packing Group:	III
Transport Label Required:	Miscellaneous Marine Pollutant
Marine Pollutant	
TECHNICAL NAME (N.O.S.):	EPOXY RESIN(S), EPOXIDE DERIVATIVE

ICAO / IATA

Dangerous Goods? X

UN PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport Hazard Class:	9
Packing Group:	III
UN Number:	UN3082
Transport Label Required:	Miscellaneous
TECHNICAL NAME (N.O.S.):	EPOXY RESIN(S), EPOXIDE DERIVATIVE

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15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

Ozone Depleting Substances (Regulation (EC) No 1005/2009): Not applicable
Persistent Organic Pollutants (Regulation (EC) No 850/2004): Not applicable

EPA New Zealand HSNO approval code or group standard: HSR002503
Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

Health and Safety at Work Hazardous Substances Regulations 2017

Tracking:
This product does not require tracking

Certified Handler:
This product does not require a certified handler.

Controlled Substance: This product does not require a Controlled Substance Licence

Inventory Information

New Zealand: This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

Australia: All components of this product are included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

United States (USA): All components of this product are designated as “Active” on the TSCA Inventory or are not required to be listed.

Canada: One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: One or more components of this product are NOT included on the Japanese (ENCS and/or ISHL) inventories.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

Taiwan: All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

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16. OTHER INFORMATION

Reasons for Issue:

Date Prepared: 6-Dec-2024

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

SAFETY DATA SHEET

SDS: 0062402
Date Prepared: 6-Dec-2024

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: **AQUAKEM A**
Product Description: Hardener for epoxy resins
Intended/Recommended Use: Recommended for Industrial and/or Professional use only
Uses advised against: Not available

Bondlast Construction Products.
24-28 Lady Ruby Drive, East Tamaki, Auckland 2013, New Zealand

For Product and all Non-Emergency Information call +64 (09) 267 2772 (business hours only) or contact us at https://www.dglbondlast.co.nz/contact/

EMERGENCY TELEPHONE NUMBER
Poisons Information Centre, New Zealand: 0800 764 766

2. HAZARDS IDENTIFICATION

Regulatory information
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2020

EPA New Zealand HSNO approval code or group standard: HSR002503

Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

GHS Classification
Skin Irritation Category 2
Serious Eye Damage / Eye Irritation Category 1
Skin Sensitizer Category 1A
Hazardous to the Aquatic Environment Chronic Category 3

LABEL ELEMENTS

Signal Word
Danger

Hazard Statements

Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention

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

Response

IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label). Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Disposal

Dispose of contents/container in accordance with local and national regulations.

OTHER HAZARDS
Not applicable

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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Mixture

Component / CAS No.	**%**
Titanium Dioxide 13463-67-7	20 - 30
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 68082-29-1	8 - 11
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine 68071-65-8	8 - 11
Limestone (calcium carbonate - not classified) 1317-65-3	3 - 6

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4. FIRST-AID MEASURES

Emergency telephone number
Poisons Information Centre, New Zealand: 0800 764 766

First-aid Measures

Inhalation:

Remove to fresh air. Get medical attention immediately if symptoms occur.

Skin Contact:
Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. Wash immediately with plenty of water and soap. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.

Eye Contact:
Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Ingestion:
Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Most Important Symptoms and Effects, Acute and Delayed
Burning sensation. Itching. Rashes. Hives.

Immediate Medical Attention and Special Treatment
Notes To Physician:
May cause sensitisation in susceptible persons. Treat symptomatically.

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media:
full water jet.

Protective Equipment:
Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Special Hazards:
Product is or contains a sensitiser. May cause sensitization by skin contact.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods For Containment:
Prevent further leakage or spillage if safe to do so.

Methods For Cleaning Up:
Take up mechanically, placing in appropriate containers for disposal.

Environmental Precautions:
Avoid release to the environment.

References to other sections:
See Sections 7, 8 and 13 for additional information.

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7. HANDLING AND STORAGE

Handling

Precautions: Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves. Wear protective eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Special Handling Statements: Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash it before reuse.

Storage

Keep container tightly closed and dry in a cool, well-ventilated place. Store locked up. Keep out of reach of children. Keep from freezing.

Storage Temperature: Ambient temperature
Reason: Quality.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS - Limits

Titanium Dioxide 13463-67-7

New Zealand:	10 mg/m^3	(TWA)
ACGIH (TLV):	10 mg/m^3	(TWA)

Limestone (calcium carbonate - not classified) 1317-65-3

New Zealand:	10 mg/m^3	(TWA)

Biological Exposure Limit(s)

No values have been established.

Engineering Measures:
Ensure adequate ventilation, especially in confined areas.

Respiratory Protection:
Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Where exposures are below the established exposure limit, no respiratory protection is required. Where respiratory protection is required, use a respirator selected and in accordance with AS/NZS 1715 and AS/NZS 1716.

Eye protection:
Tight sealing safety goggles.

Skin Protection:
Wear suitable protective clothing.

Hand protection:
Wear protective gloves. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

Additional Advice:
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	liquid viscous
Colour:	white
Odor:	slight
Odor Threshold:	See Section 8 for exposure limits.
Melting Point:	Not available
Boiling Point:	> 100 °C
Flammability:	Not available
Flammable Limits (% By Vol):	Not available
Flash point:	~ 185 °C
Autoignition temperature:	Not available
Decomposition Temperature:	Not available
pH:	Not available
Viscosity (Kinematic):	
Viscosity (Dynamic):	~ 3000 - 5500
Solubility In Water:	dispersible
Solubility In Solvent:	Not available
Partition coefficient (n-octanol/water):	Not available
Vapor Pressure:	Not available
Specific Gravity/Density:	~ 1.2 - 1.3 g/cm³ -
Vapour density:	Not available
Particle characteristics:	Not applicable

9.2 OTHER INFORMATION

9.2.1 Information with regard to physical hazard classes
Not applicable

9.2.2 Other safety characteristics
Not applicable

10. STABILITY AND REACTIVITY

Reactivity:	No information available
Stability:	Stable
Conditions To Avoid:	Protect from heat and direct sunlight.
Polymerization:	Will not occur
Conditions To Avoid:	None known.
Materials To Avoid:	Strong oxidizing agents. Strong acids

	Strong bases
Hazardous Decomposition Products:	None known

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11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin, Eyes, Oral.

HEALTH HAZARD INFORMATION

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - dermal: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - inhalation: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

Skin corrosion / irritation: Causes skin irritation
Serious eye damage / eye irritation: Causes serious eye damage

Respiratory sensitization: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Skin sensitization: May cause an allergic skin reaction

Carcinogenicity: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Germ cell mutagenicity: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Reproductive toxicity: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Specific target organ toxicity (single exposure): Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.
Specific target organ toxicity (repeated exposure): Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

Aspiration hazard: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

PRODUCT TOXICITY INFORMATION

ACUTE TOXICITY DATA

oral	rat	Acute LD50		> 2000	mg/kg
dermal	rabbit	Acute LD50		> 2000	mg/kg
inhalation	rat	Acute LC50	4 hr	> 5	mg/l (Dust/Mist)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	dermal	Irritating
Acute Irritation	eye	Causes serious damage

ALLERGIC SENSITIZATION

Sensitization	Skin	Severe Sensitizing
Sensitization	respiratory	No data

GENOTOXICITY

Assays for Gene Mutations
Ames Salmonella Assay No data

OTHER INFORMATION
The product toxicity information above has been estimated.

HAZARDOUS INGREDIENT TOXICITY DATA

Titanium dioxide has an acute oral (rat) LD50 value of >5000 mg/kg. No mortality was observed up concentrations of 6.82 mg/L. In vivo skin and eye irritation studies with titanium dioxide have not showed adverse effects. Titanium dioxide has not shown skin nor respiratory sensitising properties. Based on a comprehensive dataset of in vitro and in vivo studies, genotoxicity is not expected. Titanium dioxide does not present a reproductive toxicity hazard. Titanium dioxide has extensively been tested for carcinogen effects via the inhalation route. Tumours were observed, but there is a general consensus that the tumours are not induced by intrinsic carcinogenic effects of Titanium dioxide, but rather by physical toxicity due to lung overload. The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter up to 10µm.

The acute oral and dermal LD50 values of Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine are > 2000mg/kg bodyweight. This substance gives mild skin irritation and serious eye damage. Sensitizing effects have been observed in animal testing. No major adverse effects were seen in a repeated dose toxicity test. No genotoxicity could be evidenced in in-vitro testing. There is no experimental evidence for adverse effects in reproduction. No data are available on carcinogenicity.

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12. ECOLOGICAL INFORMATION

Aquatic Chronic Toxicity: Harmful to aquatic life with long lasting effects

The ecological assessment for this material is based on an evaluation of its components.

ECOTOXICITY
Not available

BIOACCUMULATIVE POTENTIAL
Not available

PERSISTENCE AND DEGRADABILITY
Not available

MOBILITY IN SOIL
Not available

OTHER ADVERSE EFFECTS

HAZARD TO THE OZONE LAYER
Not available

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	LC50 = 7.07 mg/L - Danio rerio (96h) NOEC = 5 mg/L - Danio rerio (96h)
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine (68071-65-8)	Not available
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available

Component / CAS No.	Toxicity to Water Flea
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	EC50 = 9.72 mg/L - Daphnia magna (48h)
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine (68071-65-8)	Not available
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available

Component / CAS No.	Toxicity to Algae
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	EC50 = 4.34 mg/L - Algae (72h)
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine (68071-65-8)	Not available
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available

Component / CAS No.	Partition coefficient
Titanium Dioxide (13463-67-7)	Not available
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and	Not available

triethylenetetramine (68082-29-1)	
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine (68071-65-8)	Not available
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
The company encourages the recycle and reuse of products and packaging, where possible and permitted.

Product disposal
When recycle or reuse is not possible, the comany recommends that our products, especially when classified as hazardous, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

Packaging disposal
Handle contaminated packages in the same way as the product itself. Disposal of emptied and cleaned packaging must be made in accordance with applicable local and national regulations.

Disposal-relevant information
Do not release directly or indirectly to surface water, ground water, soil or public sewage system.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

Road transport

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

Ozone Depleting Substances (Regulation (EC) No 1005/2009): Not applicable
Persistent Organic Pollutants (Regulation (EC) No 850/2004): Not applicable

EPA New Zealand HSNO approval code or group standard: HSR002503
Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

Health and Safety at Work Hazardous Substances Regulations 2017

Tracking:
This product does not require tracking

Certified Handler:
This product does not require a certified handler.

Controlled Substance: This product does not require a Controlled Substance Licence

Inventory Information

New Zealand: This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

Australia: All components of this product are included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

United States (USA): One or more components of this product are NOT included on the U.S. Toxic Substances Control Act (TSCA) Inventory. The chemical, physical, and toxicological properties of this material have not been fully investigated. Its handling or use may be hazardous, and it must be used under the supervision of technically qualified individuals. Materials not included on the TSCA Inventory may only be used for research and development (R&D) purposes or in other TSCA exempt activities.

Canada: One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: One or more components of this product are NOT included on the Japanese (ENCS and/or ISHL) inventories.

Philippines: One or more components of this product are NOT included on the Philippine (PICCS) inventory.

Taiwan: One or more components of this product are NOT included in the Taiwan chemical substance inventory (TCSI).

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16. OTHER INFORMATION

Reasons for Issue:

Date Prepared: 6-Dec-2024

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		