SAFETY DATA SHEET

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: **HUMEBOND RESIN**
Product Description: Epoxy resin and fillers.
Intended/Recommended Use: Binder
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 2
Skin Sensitizer Category 1B
Hazardous to the Aquatic Environment Chronic Category 2

LABEL ELEMENTS

Signal Word
Warning

Hazard Statements
Causes skin irritation
Causes serious eye irritation

May cause an allergic skin reaction
Toxic 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. If eye irritation persists: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Collect spillage.

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 or Mixture?: Mixture

Component / CAS No.	**%**
Silica, quartz 14808-60-7	48-52
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) 25068-38-6	20-<25
Limestone (calcium carbonate - not classified) 1317-65-3	5-10
Talc 14807-96-6	5-10
Phenol, polymer with formaldehyde, glycidyl ether 28064-14-4	2-4
Titanium Dioxide 13463-67-7	1-3

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:
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.

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:
In case of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Product is or contains a sensitiser.

HAZCHEM Code: •3Z

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.

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. 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.

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

Storage Temperature: Ambient temperature
Reason: Quality.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS - Limits

Silica, quartz 14808-60-7

New Zealand:	0.05 mg/m^3 respirable dust (TWA)
ACGIH (TLV):	0.025 mg/m^3 respirable particulate matter (TWA)

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

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

Talc 14807-96-6

New Zealand:	2 mg/m^3 respirable dust (TWA)
ACGIH (TLV):	2 mg/m^3 (TWA)

Titanium Dioxide 13463-67-7

New Zealand:	10 mg/m^3 (TWA)
ACGIH (TLV):	0.2 mg/m^3 nanoscale respirable particulate matter (TWA)
	2.5 mg/m^3 finescale respirable particulate matter (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. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. 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:	thick paste
Colour:	white
Odor:	slight
Odor Threshold:	See Section 8 for exposure limits.
Melting Point:	Not available
Boiling Point:	Not available
Flammability:	Not available
Flammable Limits (% By Vol):	Not available
Flash point:	> 150 °C
Autoignition temperature:	Not available
Decomposition Temperature:	Not available
pH:	Not available
Viscosity (Kinematic):	Not applicable
Viscosity (Dynamic):	No information available
Solubility In Water:	Insoluble
Solubility In Solvent:	Not available
Partition coefficient (n-octanol/water):	Not available

Vapor Pressure:	Not available
Specific Gravity/Density:	1.5 g/cm³
Vapour density:	> 1
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:	Carbon monoxide and carbon dioxide

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Oral, Skin, Eyes.

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: 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	Skin	Irritating
Acute Irritation	eye	Irritating

ALLERGIC SENSITIZATION

Sensitization	Skin	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

Quartz silica (respirable fraction) can cause reduced pulmonary function when inhaled. Exposure to respirable quartz silica can cause delayed (chronic) fibrosis and other lung injury. Chronic inhalation exposure showed that quartz silica can cause lung cancer in rats but not in mice. There is also limited human evidence which shows an association of lung cancer with occupational exposure to quartz silica. This material is reported to have shown positive results in in vitro mutagenicity tests with human cell cultures. Studies have shown that tobacco smoking and high quartz silica exposure exhibit a synergistic effect for lung cancer. Silica, crystalline is a chemical known to the State of California to cause cancer.

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.

No significant adverse effects were observed in epidemiology studies on talc. Acute inhalation exposure to talc is not likely to cause adverse effects. Epidemiological studies showed that repeated exposure in the workplace produced no significant adverse effects in workers. Rats repeatedly exposed by inhalation to talc at 11 mg/m^3 for up to a year showed equivocal lung injury. The LC50 in the rat after a 4-hour exposure is greater than 22 mg/L.

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.

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.

TOXICITY
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
Silica, quartz (14808-60-7)	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)
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Talc (14807-96-6)	LC50 > 100 g/L - Brachydanio rerio (96h)
Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)	Not available
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility

Component / CAS No.	Toxicity to Water Flea
Silica, quartz (14808-60-7)	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)
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Talc (14807-96-6)	Not available
Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)	Not available
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility

Component / CAS No.	Toxicity to Algae
Silica, quartz (14808-60-7)	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)
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Talc (14807-96-6)	Not available
Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)	Not available
Titanium Dioxide (13463-67-7)	No toxicity observed up to the water solubility

Component / CAS No.	Partition coefficient
Silica, quartz (14808-60-7)	Not available
Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700; EU-CAS 1675-54-3) (25068-38-6)	Not available
Limestone (calcium carbonate - not classified) (1317-65-3)	Not available
Talc (14807-96-6)	Not available
Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)	Not available
Titanium Dioxide (13463-67-7)	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? 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)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)

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)

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

16. OTHER INFORMATION

Reasons for Issue: Date update

Date Prepared: 30-Jan-2024
Date of last significant revision: 30-Jan-2024

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION