

Prepared in accordance with the Australian National model Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals (2011)

Revision date: January 2024

According to the Model Work Health and Safety Regulation (WHS) of January 9, 2014, a Safety Data Sheet (SDS) must be provided for substances or mixtures that are classified as hazardous according to the Globally Harmonized System (GHS). This product does not meet the classification criteria of GHS. Therefore such document is outside the scope of Chapter 7.1 article 330 of WHS Regulation and the requirements for content in each section do not apply.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: 8.03 Epoxy Tie Coat Part C

Product code: 8.03

Synonyms: None

Recommended use: External additive in toner formulations

Restrictions on use: Not Applicable.

Supplier:

Rockbond SCP
7 Te Puni St
Petone
Wellington
0800 762 526

Emergency Contacts:

National Poisons Centre
0800 764 766 (0800 POISON) Other
Countries
0064 3 479 7248
New Zealand Fire Service – 111

2. HAZARDS IDENTIFICATION

Classification

Not hazardous according to the WorkSafe Australia designated list of hazardous substances.

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Rev. 3 referred in Australia Model Work Health and Safety Regulation (WHS).

Pictogram:

None

Signal Word:

None

Hazard statements:

None

Precautionary statements:

None

**Hazards not otherwise classified
(HNOC)**

This substance is classified as hazardous as a combustible dust by the United States 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulation (HPR) 2015. The signal word, hazard statement and precautionary statements in the United States and Canada are: WARNING May form combustible dust concentrations in air. Keep away from all ignition sources including heat, sparks and flame. Prevent dust accumulations to minimize explosion hazard.

Do not expose to temperatures above 200°C. Hazardous products of combustion can include carbon monoxide, carbon dioxide and nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating gases and vapors.

Potential health effects

Principle Routes of Exposure: Inhalation, Skin Contact, Eye contact

Eye Contact: May cause mechanical irritation. Avoid contact with eyes.

Skin Contact: May cause mechanical irritation and skin drying. Avoid contact with skin.

Inhalation: Dust may be irritating to respiratory tract. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. See also Section 8.

Ingestion: Adverse health effects are not expected. See Section 11.

Carcinogenicity: Does not contain any substances greater than 0.1% listed by IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACGIH (American Conference for Governmental Industrial Hygienists) or EU (European Union). See also Section 11.

Target Organ Effects: Lungs, See Section 11

Medical Conditions Aggravated by Exposure: Asthma, Respiratory disorder

Potential Environmental Effects: None known. See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	weight-%	Trade secret
Modified silica-polymer particle	-	>99.9	**

Other Information:

** Proprietary

The hyphen (-) means "not applicable"

4. FIRST AID MEASURES

FIRST AID MEASURES

Skin Contact	Wash thoroughly with soap and water. Seek medical attention if symptoms develop.
Eye contact	Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if symptoms develop.
Inhalation	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
Ingestion	Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in Section 2 and/or in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use foam, carbon dioxide (CO ₂), dry chemical or water spray. A fog is recommended if water is used.
Unsuitable Extinguishing Media:	DO NOT USE high pressure media which could cause formation of a potentially explosible dust-air mixture.
Specific hazards arising from the chemical:	None.
Hazardous combustion products:	Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrogen oxides (NO _x). Thermal decomposition can lead to release of irritating gases and vapors.
Protective equipment and	Wear suitable protective equipment. In the event of fire, wear self-contained breathing

precautions for firefighters: apparatus.

Risk of Dust Explosion: Dust may form explosive mixture in air See also Section 9

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid dust formation. Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. See also Section 8.

For emergency responders: Use personal protection recommended in Section 8.

Environmental Precautions:

Environmental Precautions: Contain spilled product on land, if possible. Local authorities should be advised if significant spillages cannot be contained.

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: If the spilled material contains dust or has the potential to create dust, use explosion-proof vacuums and/or cleaning systems suitable for combustible dusts. Use of a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Do not create a dust cloud by using a brush or compressed air. Dry sweeping is not recommended. Pick up and transfer to properly labelled containers. See Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Dust may form explosive mixture in air.

Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry and well-ventilated place. Do not store together with volatile chemicals as they may be adsorbed onto product. Store at ambient conditions. Keep away from heat and sources of ignition. Keep in properly labeled containers.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released in the atmosphere in sufficient concentrations.

Incompatible materials: No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines: There are no exposure limits identified for this product. Exposure limits for dust are stated below. Exposure limits for silica are stated below.

Amorphous Silica, The regulatory exposure limits are found under the general silica, CAS RN 7631-86-9:	Australia:	2 mg/m ³ , TWA, Respirable
	Austria MAK	4 mg/m ³ , TWA, Inhalable fraction
	Finland:	5 mg/m ³
	Germany TRGS 900:	4 mg/m ³ , TWA, Inhalable fraction
	India:	10 mg/m ³ , TWA
	Ireland:	2.4 mg/m ³ , TWA, Respirable dust
	Norway:	1.5 mg/m ³ , TWA, Respirable dust
	Switzerland:	4 mg/m ³ , TWA
	UK WEL:	6 mg/m ³ , TWA, Inhalable fraction 2.4 mg/m ³ , TWA, Respirable fraction
	US OSHA PEL:	6mg/m ³ (54 FR2701)

Dust, or Particulates Not Otherwise Specified:	Belgium:	10 mg/m ³ , TWA, Inhalable 3 mg/m ³ TWA, Respirable
	China:	8 mg/m ³ , TWA 10 mg/m ³ , STEL
	France:	10 mg/m ³ , TWA Inhalable dust 5 mg/m ³ , TWA Respirable dust
	Italy:	10 mg/m ³ , TWA, Inhalable 3 mg/m ³ , TWA, Respirable
	Malaysia:	10 mg/m ³ , TWA, Inhalable 3 mg/m ³ , TWA, Respirable
	Spain:	10 mg/m ³ , VLA, Inhalable 3 mg/m ³ , VLA, Respirable
	US ACGIH - PNOS:	10 mg/m ³ , TWA, Inhalable 3 mg/m ³ , TWA, Respirable
	US OSHA - PEL:	15 mg/m ³ , TWA, Total dust 5 mg/m ³ , TWA, Respirable

NOTE:

MAK: Maximale Arbeitsplatzkonzentration (Maximum Workplace Concentration)
 PEL: Permissible Exposure Limit
 PNOS: Particulate Not Otherwise Specified
 STEL: Short Term Exposure Limit
 TRGS: Technische Regeln für Gefahrstoffe (Technical Rule for Hazardous Materials)
 TWA: Time Weighted Average
 US ACGIH: United States American Conference of Governmental Industrial Hygienists

US OSHA: United States Occupational Safety and Health Administration
VLA: Valore Limite Ambientales (Environmental Limit Value)
WEL: Workplace Exposure Limit

Engineering Controls: Ensure adequate ventilation to maintain exposures below occupational limits. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated.

Where possible, use automated and enclosed processes for dry blending and filling containers (toner cartridges,)

Personal protective equipment [PPE]

Respiratory Protection: If exposures are expected, wear a certified particulate respirator in accordance with national regulation:
US: NIOSH-certified respirator (42 CFR 84)
EU: EN-certified respirator (EU Directive 89/686/EEC).

Hand Protection: Wear protective gloves to prevent skin drying. Use protective barrier cream before handling the product. Wash hands and other exposed skin with mild soap and water.

Eye/face Protection: Wear eye/face protection. Wear safety glasses with side shields (or goggles).

Skin and Body Protection: Wear suitable protective clothing. Wash clothing daily. Work clothing should not be allowed out of the workplace.

Other: Handle in accordance with good industrial hygiene and safety practice. Emergency eyewash and safety shower should be located nearby.

Environmental exposure controls: In accordance with all local legislation and permit requirements as applicable for dusts.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	Odor:	None.
Appearance:	Powder	Odor threshold:	Not Applicable
Color:	Off-white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH:		No information available
Melting point/freezing point:		No information available
Boiling point / boiling range:		No information available
Evaporation Rate:		Not Applicable
Vapor pressure:		Not Applicable
Vapor Density:		Not Applicable
Density:	1.4 - 2.2 g/cm ³	
Bulk Density:		No information available

Specific Gravity at 20°C:	1.4-2.2	
Water solubility:	Insoluble in water	
Solubility(ies):	Insoluble in solvents	
Partition Coefficient (n-octanol/water):		Not Applicable
Decomposition temperature:	> 200 °C	Bulk Powder test- Diffusion cell
Viscosity:		Not Applicable

Kinematic viscosity:		Not Applicable
Dynamic viscosity:		Not Applicable
Oxidizing Properties:		No oxidizing properties
Softening point:		No information available
VOC content (%):		Not Applicable
% Volatile (by Volume):		Not Applicable
% Volatile (by Weight):		Not Applicable
Surface Tension:		Not Applicable
Explosive properties:		Dust may form explosible mixture in air
Flash Point:		Not Applicable
Flammability (solid, gas):	Not flammable	Not readily combustible (Class 4.1) per UN Recommendations on the Transportation of Dangerous Goods test method
Flammability Limit in Air:		
Explosion Limits in Air - Upper (g/m³):		No information available
Explosion Limits in Air - Lower (g/m³):	>160 g/m ³	ASTM E-1515, Dust cloud
Autoignition Temperature:		No information available
Minimum Ignition Temperature:	450-550 °C	ASTM E-1491, Dust cloud
	240-250 °C	ASTM E-2021, Dust layer
Minimum Ignition Energy:	300-500 mJ	Low sensitivity to ignition. ASTM E-2019, Dust cloud
Ignition Energy:		No information available
Maximum Absolute Explosion Pressure:	7.1 bar	ASTM E-1226 (20-L Sphere Test)
Maximum Rate of Pressure Rise:	536 bar/sec	ASTM E-1226 (20-L Sphere Test)
Burn Velocity:		No information available
Kst Value:	145 bar.meter/second	ASTM E-1226 (20-L Sphere Test)
Dust Explosion Classification:	ST1	Weak Explosion ASTM E-1226 OSHA CPL-03-00-008

End point is listed "not applicable" due to the inherent properties of the substance
"No information available" indicates testing has not been performed

10. STABILITY AND REACTIVITY

Reactivity:	Not reactive.
Stability:	Stable under recommended handling and storage conditions. Stable up to 200° C. Onset temperature: 213°C (Bulk Powder Test - Diffusion cell).
Possibility of hazardous reactions:	None under normal processing.
Hazardous polymerization:	Hazardous polymerization does not occur.
Conditions to avoid:	Do not expose to temperatures above 200°C. (Bulk Powder Test - Diffusion Cell). Keep away from heat and sources of ignition. Avoid dust formation.
Incompatible materials:	No information available.
Explosion data	See also Section 9.
Sensitivity to Mechanical Impact:	None.
Sensitivity to Static Discharge:	Dust may form explosible mixture in air. Avoid dust formation. Do not create a dust cloud by using a brush or compressed air. Take precautionary measures against static

discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations.

Hazardous decomposition products: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50: LD50/oral/rat = > 2000 mg/kg. No deaths occurred and no signs of toxicity were seen during the observation periods after single oral administration of the substance, (OECD 420).

Inhalation LC50: No information available

Dermal LD50: No information available.

Skin corrosion/irritation: Primary irritation index = 0.0 @ 24 hr. Not classified as an irritant (OECD 404)

Serious eye damage/eye irritation: May cause mechanical irritation. Eye irritation test, rabbit (OECD 405): Not irritating. Not classified as an eye irritant per UN GHS rules.

Sensitization: Contains no known sensitizers.

Germ Cell Mutagenicity Not mutagenic in Ames test.

Carcinogenicity: No information available.

Reproductive and Developmental Toxicity: No information available.

STOT - single exposure: No information available.

STOT - repeated exposure: No information available.

Aspiration Hazard: No information available.

12. ECOLOGICAL INFORMATION

Product, as formulated, has not been tested.

Aquatic Toxicity: No information available

ENVIRONMENTAL FATE

Persistence and degradability No information available

Bioaccumulation No information available.

Mobility: No information available.

Distribution to Environmental Compartments: No information available.

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 3 of this MSDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations. The person generating waste must determine its proper classification

Unused and Uncontaminated Product: Product, as supplied, should be disposed of in accordance with the regulations issued by the appropriate federal, state and local authorities. Same consideration should be given to containers and packaging.

14. TRANSPORT INFORMATION

Note: Not a self-heating solid (Class 4.2) per UN/DOT Recommendations on the Transportation of Dangerous Goods test method

DOT

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

ICAO (air)

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

IATA

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

IMDG

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

RID

UN/ID no	Not regulated
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Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

ADR

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

15. REGULATORY INFORMATION

Classification

Not hazardous according to the WorkSafe Australia designated list of hazardous substances.

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Rev. 3 referred in Australia Model Work Health and Safety Regulation (WHS).

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	Complies
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List	Complies
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances	Complies
ENCS - Japan Existing and New Chemical Substances	Complies
IECSC - China Inventory of Existing Chemical Substances	Complies
KECL - Korean Existing and Evaluated Chemical Substances	Complies
PICCS - Philippines Inventory of Chemicals and Chemical Substances	Complies
AICS - Australian Inventory of Chemical Substances	Does not comply
NZIoC - New Zealand Inventory of Chemicals	Complies
TCSI - Taiwan Chemical Substance Inventory	Complies

16. OTHER INFORMATION

Cosmetic Use:

Not permitted.

Product code: 8.03

Product name: Epoxy Tie Coat

Revision date: 01/05/2023

Pharmaceutical Use:

Not permitted

Food Additive Use:

Not permitted

Contacts:

Rockbond Special Concrete Products
7 Te Puni St
Petone
Wellington
0800762526

Disclaimer:

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End of Safety Data Sheet