

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF PRODUCT AND COMPANY

Product: Ronabond EPA 711 - Part A  
Company: Ronacrete (Far East) Ltd., 16/F, No. 3 Lockhart Rd,  
Wanchai, Hong Kong SAR  
Tel/Fax: +852 2865 5872 / +852 2865 5568

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### 2. COMPOSITION

Name	Cas No.	Proportion
Bisphenol A epoxy resin	25068-38-6	High
Aliphatic Glycidyl Ether	68609-97-2	Low
Other ingredients determined not to be hazardous		To 100 %

V.High >60, High 30 - 60, Med 10 - 29, Low 1 - 9, V.Low <1  
All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS) and National Registration Authority (NRA) approved active constituents.

To be used with Ronabond EPA 711 - Part B

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### 3. HAZARDS IDENTIFICATION

Hazard Category: Xn Harmful, Xi Irritant  
Risk Phrases: R21/22 Harmful in contact with skin and if swallowed  
R43 May cause sensitisation by skin contact.  
D.G. Class: Not classified as dangerous goods  
Subsidiary Risk: Nil  
Poison Schedule: S 5  
This product is a Schedule Poison S 5 and must be stored, maintained and used in accordance with the relevant regulation.

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### 4. FIRST AID MEASURES

Ingestion: If swallowed do not induce vomiting. Rinse mouth with water, give glass of water and seek medical attention.  
Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.  
Skin contact: Remove contaminated clothing and footwear. Wash skin thoroughly with water. If swelling, redness, blistering or irritation occurs seek medical attention.  
Inhalation: Remove victim from exposure to fresh air. If breathing difficulty, apply artificial respiration and seek medical attention.  
Note to Physician: Treat the patient symptomatically.

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### 5. FIRE FIGHTING MEASURES

Extinguishing media: Water, Foam, Dry chemical powder, Carbon dioxide.  
Specific Hazards: The material is stable under normal conditions. Hazardous polymerisation can occur on heating. On decomposition gives off carbon dioxide, carbon monoxide and other gases. Incompatible with alkalis, acids and strong oxidizers.  
Fire Fighters: Wear positive pressure, self-contained breathing apparatus and full protective clothing.

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## MATERIAL SAFETY DATA SHEET

### 6. ACCIDENTAL RELEASE MEASURES

- Small Spills:** Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes.
- Large Spills:** Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes. If contamination of crops, waterways, drains or sewerage has occurred, advise Emergency Services or State Department of Agriculture.

### 7. HANDLING AND STORAGE

- Storage:** Store in the closed, original container in a cool ventilated area. Keep containers tightly closed when not in use. Keep away from explosives, food, oxidising agents and organic peroxides. This product is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits:** No value assigned for this specific product by the National Occupational and Safety Commission (Worksafe Australia). However, supplier recommended Hygiene Standard as under  
TWA STEL Carcinogen Notices

Material	TWA		STEL		Notices
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Bisphenol A resin	N/E*	N/E*	N/E*	N/E*	-
Aliphatic glycidyl ether	N/E*	N/E*	N/E*	N/E*	-

N/E\* - No Exposure Standard has been established for this product.

- Eng. Controls:** Special ventilation is not normally required due to the low volatility of the product at normal temperature. However, in the operation of certain equipment or at elevated temperatures, mists or vapours may be generated and exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standards or where no exposure standard is allocated, as low as reasonably practicable.
- Personal Protection:** Use overalls, safety shoes, safety goggles, rubber or chemical resistance gloves and respirator if required.
- Manufacturing, Packaging & Transport:** Avoid skin and eye contact and the inhalation of vapour. Wear overalls, safety goggles and impervious gloves. Available information suggests that the Gloves made from PVC should be suitable for intermittent contact. However due to variations in glove construction and local conditions, the final assessment should be made by the user. If inhalation risk exists, wear organic vapour respirator meeting requirements of AS/NZS 1715 and 1716. Always wash hands with soap and water before smoking, eating, drinking or using toilet facilities.
- Preparations & use of product:** Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale mist or vapours. After each day's use, wash gloves, safety goggles and all the contaminated clothing.

## MATERIAL SAFETY DATA SHEET

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	White paste
Solubility :	Insoluble in water
Specific Gravity :	1.45 - 1.50
Boiling Point :	More than 200 deg. C
Rel.Vapour Density (air=1) :	> 1
Melting Range :	Not established
Vapour Pressure (20o C) :	Less than 0.01 Pa
Decomposition Temp.(o C) :	More than 200 deg. C
Flash Point (o C) :	More than 200 deg. C ( ASTM D 93 )
Flammability Limits (%) :	Not established
Ph :	Not applicable
Autoignition Temp. (o C) :	Not established
% Volatile by Volume :	Nil
(All above values are Typical Values only)	
VOC:	< 65 grams per litre

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### 10. STABILITY AND REACTIVITY

The product is stable under normal conditions and use.

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### 11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

#### Acute Effects:

Ingestion:	Harmful if swallowed. May cause gastrointestinal discomfort and irritation.
Eye:	Brief contact may cause mild irritation to eyes.
Skin:	Mild irritant and poorly absorbed through the skin. Prolonged and repeated contact may cause sever irritation and/or dermatitis
Inhaled:	Not hazardous at ambient temperatures. Vapours generated at elevated temperatures or when inhaled repeatedly may cause irritation to nose, throat and respiratory tract.

Long Term Effects: Repeated skin contact and inhalation may result in sensitisation in some individuals. May cause allergic reaction, dermatitis or asthma like symptoms. Follow good working practice. Avoid ingestion, inhalation, eye and skin contact. Wash hands with soap and water before eating, drinking, smoking or using toilet facilities.

Acute & Chronic:  
Toxicity: Negative in a battery of mutagenicity assays.  
No evidence of carcinogenicity was observed in long term studies of rats.  
No developmental nor reproductive effects in rat and rabbit.

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### 12. ECOLOGICAL INFORMATION

Avoid contamination of drains, sewerage, creeks and waterways.  
Not toxic to aquatic organisms

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### 13. DISPOSAL CONSIDERATIONS

Dispose all empty containers as per State & Council Regulation. Do not dispose near waterways, vegetation and tree roots. Empty containers and product should not be burned.

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**MATERIAL SAFETY DATA SHEET**

## 14. TRANSPORT INFORMATION

UN. No. : Not Allocated  
Shipping Name : Not Applicable  
Class : Not classified as dangerous goods  
Subsidiary Risk : Nil  
Packaging Group : Not Applicable  
Hazchem Code : Not Applicable  
EPG : Not Applicable  
Segregation : Not to be loaded with explosives, oxidising agents or organic peroxides.

For road, marine and air transport this product is not classified as dangerous goods within the context of National and International Transport Regulation.

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15. REGULATORY INFORMATION

The National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC : 10005 (1999)].  
The National Standard for the Storage and Handling of Workplace Dangerous Goods [NOHSC : 1015 (2001)].

Type of Regulated Paint under the Air Pollution Control (Volatile Organic Compounds) Regulation of Hong Kong: Ceramic tile adhesives

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16. OTHER INFORMATION

The information given here is to the best of our knowledge true and accurate and is provided solely for making safety assessments. It is not a sales specification or an indication of suitability for a particular use.

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**MATERIAL SAFETY DATA SHEET****1. IDENTIFICATION OF PRODUCT AND COMPANY**

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Wanchai, Hong Kong SAR  
Tel/Fax: +852 2865 5872 / +852 2865 5568

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**2. COMPOSITION**

Name	Cas No.	Proportion
Polyaminoamide	68082-29-1	High

Other ingredients determined  
not to be hazardous To 100 %  
V.High >60, High 30 - 60, Med 10 - 29, Low 1 - 9, V.Low <1  
All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS)  
and National Registration Authority (NRA) approved active constituents.

To be used with Ronabond EPA 711 - Part A

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**3. HAZARDS IDENTIFICATION**

Hazard Category: Xn Harmful, Xi Irritant  
Risk Phrases: R21/22 Harmful in contact with skin and if swallowed  
R43 May cause sensitisation by skin contact.  
D.G. Class: Not classified as dangerous goods  
Subsidiary Risk: Nil  
Poison Schedule: S 5  
This product is a Schedule Poison S 5 and must be stored, maintained and  
and used in accordance with the relevant regulation.

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**4. FIRST AID MEASURES**

Ingestion: If swallowed do not induce vomiting. Rinse mouth with water, give glass of  
water and seek medical attention.  
Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes.  
Eyelids to be held open. Seek immediate medical assistance.  
Skin contact: Remove contaminated clothing and footwear. Wash skin thoroughly with  
water. If swelling, redness, blistering or irritation occurs seek medical  
attention.  
Inhalation: Remove victim from exposure to fresh air. If breathing difficulty, apply artificial  
respiration and seek medical attention.  
Note to Physician: Treat the patient symptomatically.

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**5. FIRE FIGHTING MEASURES**

Extinguishing media: Water, Foam, Dry chemical powder, Carbon dioxide.  
Specific Hazards: The material is stable under normal conditions. Hazardous polymerisation  
can occur on heating. On decomposition gives off carbon dioxide, carbon  
monoxide and other gases. Incompatible with alkalis, acids and strong  
oxidizers.  
Fire Fighters: Wear positive pressure, self-contained breathing apparatus and full protective  
clothing.

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## MATERIAL SAFETY DATA SHEET

### 6. ACCIDENTAL RELEASE MEASURES

**Small Spills:** Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes.

**Large Spills:** Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes. If contamination of crops, waterways, drains or sewerage has occurred, advise Emergency Services or State Department of Agriculture.

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**Exposure Limits:** No value assigned for this specific product by the National Occupational and Safety Commission (Worksafe Australia). However, supplier recommended Hygiene Standard as under  
TWA STEL Carcinogen Notices

Material	TWA		STEL		Notices
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Polyaminoamide	N/E*	N/E*	N/E*	N/E*	-
Tris-2,4,6 (Dimethyl-aminomethyl) Phenol	N/E*	N/E*	N/E*	N/E	

N/E\* - No Exposure Standard has been established for this product.

**Eng. Controls:** Special ventilation is not normally required due to the low volatility of the product at normal temperature. However, in the operation of certain equipment or at elevated temperatures, mists or vapours may be generated and exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standards or where no exposure standard is allocated, as low as reasonably practicable.

**Personal Protection:** Use overalls, safety shoes, safety goggles, rubber or chemical resistance gloves and respirator if required.

**Manufacturing, Packaging & Transport:** Avoid skin and eye contact and the inhalation of vapour. Wear overalls, safety goggles and impervious gloves. Available information suggests that the Gloves made from PVC should be suitable for intermittent contact. However due to variations in glove construction and local conditions, the final assessment should be made by the user. If inhalation risk exists, wear organic vapour respirator meeting requirements of AS/NZS 1715 and 1716. Always wash hands with soap and water before smoking, eating, drinking or using toilet facilities.

**Preparations & use of product:** Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale mist or vapours. After each day's use, wash gloves, safety goggles and all the contaminated clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Buff paste
Solubility :	Partially soluble in water
Specific Gravity :	1.6 - 1.7 @ 25 DEG. C
Boiling Point :	More than 200 deg. C
Rel.Vapour Density (air=1) :	> 1
Melting Range :	Not established
Vapour Pressure (20o C) :	Less than 0.01 Pa
Decomposition Temp.(o C) :	More than 200 deg. C
Flash Point (o C) :	More than 200 deg. C ( ASTM D 93 )
Flammability Limits (%) :	Not established
Ph :	Not applicable
Autoignition Temp. (o C) :	Not established
% Volatile by Volume :	Nil
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VOC:	< 65 grams per litre

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Acute & Chronic:	Negative in a battery of mutagenicity assays.
Toxicity:	No evidence of carcinogenicity was observed in long term studies of rats. No developmental nor reproductive effects in rat and rabbit.

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Product may be toxic to some aquatic organisms.

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Packaging Group : Not Applicable  
Hazchem Code : Not Applicable  
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Segregation : Not to be loaded with explosives, oxidising agents or organic peroxides.  
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