



# Safety Data Sheet: GRT Enviro-Binder (Natural)

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GRT Safety Data Sheet

Version: 1.0

Date /Revised: 30/10/2019

Product: **GRT Enviro-Binder (Natural)**

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## 1. Substance/preparation and manufacturer/supplier identification

### **GRT Envirobinder (Natural)**

Uses: Erosion Control, Dust Suppression, Soil Stabilisation

### **Manufacturer/supplier**

Global Road Technology Holdings Pty Ltd (ACN: 169 947 139)

4 Activity Court

YATALA QLD 4207

AUSTRALIA

Telephone: +61 5667 8550

Website: [www.globalroadtechnology.com](http://www.globalroadtechnology.com)

### **Emergency Information**

Poison Information Centre (Australia): 131 126

National Poisons Centre (New Zealand): 0800 POISON (0800 764 766)

Global Road Technology Inquiry Number: +61 5667 8550

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## 2. Hazard Identification

### **Classification of the substance and mixture**

No need for classification according to GHS criteria for this product.

### **Label elements and precautionary statement**

The product does not require a hazard warning label in accordance with GHS criteria.

### **Other hazards which do not result in classification**

No specific dangers known, if the regulations/notes for storage and handling are considered. If the product adheres to skin, irritation may occur when it dries.

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### 3. Composition/information on Ingredients

#### Chemical nature

Aqueous dispersion of a copolymer based on: acrylic ester.

Acrylic ester

Content (W/W): <= 40-50%

Water

Content (W/W): <= 50-60%

#### Hazardous ingredients

Alkylphenoether sulfate

Content (W/W): <=1.5%

Eye Dam./Irrit.: Cat 1

Aquatic Acute: Cat 3

Aquatic Chronic: Cat. 3

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### 4. First-Aid Measures

#### General advice

Remove contaminated clothing.

#### If inhaled

Keep patient calm, remove to fresh air, seek medical attention.

#### On skin contact

Wash thoroughly with soap and water.

#### On contact with eyes

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

#### On ingestion

Rinse mouth immediately and then drink plenty of water, seek medical attention.

#### Note to physician

Symptoms: No significant symptoms are expected due to the non-classification of the product.

Hazards: No hazards anticipated.

Treatment: Symptomatic treatment (decontamination, vital functions).

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## 5. Fire-Fighting Measures

### Suitable extinguishing media

Water spray, dry powder, foam, carbon dioxide

### Specific hazards

No particular hazards known.

### Special protective equipment

No data available.

### Further information

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

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## 6. Accidental Release Measures

### Personal precautions

Use personal protective equipment (PPE). Avoid contact with skin and eyes.

### Environmental precautions

Do not release untreated into natural waters.

### Methods for cleaning up or taking up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, diatomaceous earth). Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

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## 7. Handling and Storage

### Handling

Handle in accordance with good industrial hygiene and safety practice. After long storage, slight quantities of carbon monoxide may be formed. To our best knowledge, the occupational exposure limit (OEL) is not exceeded during use. Entering of tanks must only be performed after intensive cleaning and when it is ensured that residual vapours have been removed. Consideration of national laws and international standards for confined space entry should be taken into account. In case of doubt, the concentration of Carbon monoxide must be determined.

### Storage

Further information on storage conditions: Store protected against freezing. Avoid direct sunlight.

Protect from temperatures below: 5°C

Protect from temperatures above 60°C

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

The release and quantity of the stated substance is dependent on the processing conditions.

Ammonia, 7664-41-7;

TWA value 25 ppm (ACGIHTLV)

STEL value 35 ppm (ACGIHTLV)

TWA value 17 mg/m<sup>3</sup> ; 25ppm (AUNOEL)

STEL value 24 mg/m<sup>3</sup> ; 35 ppm (AU NOEL)

STEL value 24 mg/m<sup>3</sup> ; 34 ppm (OEL (AU))

TWA value 17 mg/m<sup>3</sup> ; 25 ppm (OEL (AU))

### Personal protective equipment

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4mm), chloroprene rubber (0.5mm), butyl rubber (0.7mm) etc. Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

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## 9. Physical and Chemical Properties

|                                                     |                                          |
|-----------------------------------------------------|------------------------------------------|
| Form:                                               | Liquid, dispersion                       |
| Colour:                                             | White                                    |
| Odour:                                              | Faint odour                              |
| Odour Threshold:                                    | No data available                        |
| pH Value:                                           | 6.5 – 8.5 (DIN ISO 976)                  |
| Information on water melting point:                 | 0°C                                      |
| Information on water boiling point:                 | 100°C                                    |
| Flash Point:                                        | Not applicable                           |
| Evaporation rate:                                   | Not applicable                           |
| Flammability (solid/gas):                           | Not Flammable                            |
| Lower Explosion Limit                               | Not applicable                           |
| Upper Explosion Limit                               | Not applicable                           |
| Thermal Decomposition:                              | No decomposition if used correctly       |
| Self-Ignition:                                      | Not Self-igniting                        |
| Explosion hazard:                                   | Not explosive                            |
| Fire Promoting Properties:                          | Not Fire-Propagating                     |
| Information on water vapour pressure:               | 23.4 hPa<br>(20°C)<br>Literature data.   |
| Density:                                            | approx. 1.02 g/cm <sup>3</sup><br>(20°C) |
| Relative Density:                                   | No data available                        |
| Relative Vapour Density (Air):                      | Not applicable                           |
| Solubility in Water:                                | Partly soluble<br>(15°C)                 |
| Miscibility with water:                             | Miscible                                 |
| Partitioning coefficient n-octanol/water (log Pow): | Not applicable                           |
| Viscosity, dynamic:                                 | 80 – 350 mPa.s<br>(23°C)                 |

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## 10. Stability and Reactivity

### Conditions to avoid

Avoid extreme temperatures.

### Thermal decomposition

No decomposition if used correctly.

Substances to avoid:

No substances known that should be avoided.

### Hazardous reactions



No hazardous reactions when stored and handled according to instructions. After long storage, slight quantities of carbon monoxide may be formed.

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

LD50 rat (oral): > 2,000-10,000 mg/kg

### Irritation

Assessment of irritating effects:

If the product adheres to skin, irritation may occur when it dries.

Not irritating to the eyes. Not irritating to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Skin corrosion/irritation rabbit (OECD Guideline 404)

Serious eye damage/irritation: (OECD Guideline 405)

### Respiratory/Skin Sensitisation

Assessment of sensitisation:

Skin sensitising effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Germ Cell Mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The product has not been tested. The statement has been derived from substance/products of a similar structure of composition.

### Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

### Reproductive Toxicity

Assessment of reproduction toxicity:

Not expected to cause reproductive toxicity (based on composition).

### Developmental toxicity

Assessment of teratogenicity:



The data available for an assessment of the effect of the substance on developmental toxicity are not sufficient for a proper evaluation.

#### **Specific target organ toxicity (single exposure):**

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

#### **Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

Assessment of repeated dose toxicity:

No adverse effects were observed after repeated inhalative exposure in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### **Aspiration hazard**

Not applicable

#### **Other Relevant Toxicity Information**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The statement was derived from products of similar composition.

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## **12. Ecological Information**

### **Ecotoxicity**

Toxicity to fish:

LC50 (96 h) > 100 mg/l, *Brachydanio rerio* (OECD Guideline 203, static)

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Aquatic plants:

EC50 (72 h) > 100 mg/l, *Scenedesmus subspicatus* (OECD Guideline 201)

Nominal concentration.

Microorganisms/Effect on activated sludge:

EC20 (0.5 h) > 100 mg/l, activated sludge, domestic (DIN EN ISO 8192-OECD 209-88/302/EEC,P.C)

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

### **Mobility**

Assessment transport between environmental compartments:

No data available.

### **Persistence and Degradability**

Elimination information:

> 70 % DOC reduction (OECD 302B; ISO 9888; 88/302/EEC, part c) Easily eliminated from water.

### **Bioaccumulation Potential**

Bioaccumulation potential:

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

### **Other Adverse Effects**

Adsorbable organically-bound halogen (AOX):

No data available.

### **Additional Information**

Other ecotoxicological advice:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.

Ecological data are determined by analogy.

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## **13. Disposal Considerations**

The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

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## **14. Transport Information**

### **Domestic Transport:**

Not classified as a dangerous good under transport regulations

### **Sea Transport**

IMDG

Not classified as a dangerous good under transport regulations

### **Air Transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations

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## **15. Regulatory Information**

### **Other Regulations**





If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Not Scheduled

#### **Registration status**

AICS, AU released/listed

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## **16. Other Information**

Recommended use: Erosion Control, Dust Suppression, Soil Stabilisation

Any other intended applications should be discussed with the manufacturer.

#### **Abbreviations**

AICS – Australian Inventory of Chemical Substances

AOX - Adsorbable organically-bound halogen

CAS Number – Chemical Abstracts Number

DIN - Deutsches Institut für Normung eV (German Institute for Standardization)

DOC – Dissolved organic carbon

EN - European Standard

GHS - Globally Harmonized System of classification and labelling of chemicals

IARC – International Agency for Research on Cancer

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods Code

ISO - International Organization for Standardization

OECD - Organisation for Economic Co-operation and Development

PPE – Personal Protective Equipment

STEL – Short-term exposure limits

TWA – time-weighted average

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*The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Global Road Technology.*

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