

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

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

2. COMPOSITION

Carboxylated styrene butadiene polymer 47%
Water Balance

3. HAZARDS IDENTIFICATION

The product is not classified as Dangerous according to EC Directive 88/379/EEC and subsequent adaptations.
(CHIP 2 Regulations in the UK)

4. FIRST AID MEASURES

Inhalation of vapour: May cause dizziness or headache
Remove to fresh air

Skin Contact: Prolonged contact may cause irritation
Wash off with soap and water
Remove soiled clothing

Eye Contact: May cause temporary irritation
Wash out with plenty of clean water
Seek medical attention if symptoms persist

Swallowing: Seek immediate medical attention

5. FIRE FIGHTING MEASURES

The product is an aqueous dispersion and is not combustible.

6. ACCIDENTAL RELEASE MEASURES

Personal protection - refer to Section 8.
Prevent the product from entering soil, natural waters and drains.
Large spillages should be contained and pumped into a receiving vessel.
Small spillages should be absorbed on inert absorbent (sand, sawdust etc).
For disposal methods refer to Section 13.

7. HANDLING AND STORAGE

Handling: No special precautions needed with normal housekeeping.
Storage: Store between +5 and +35C, protected from frost and direct sunlight.
Do not use storage vessels or pipework made of aluminium, copper or its alloys.
Detailed advice on storage systems can be provided.
Bulk tanks should be regularly cleaned and sterilised at least annually to prevent accumulation of micro organisms.
Observe safe tank entry procedures.

MATERIAL SAFETY DATA SHEET

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Provide good general ventilation in the workplace. The product contains low levels of residual organic compounds which may evaporate during application and drying. Where the product is dried or sprayed, local extraction is recommended.

Respiratory protection: In poor ventilation, e.g. inside storage tanks or when spraying without proper extraction, wear a suitable respirator.
Hand protection: For frequent contact wear impermeable gloves.
Eye protection: Goggles, face visor or safety glasses advised.
Skin protection: If there is a risk of severe splashing, wear waterproof overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: milky white liquid
Odour: characteristic
pH: 9.0 - 10.0
Boiling point: approx. 100 °C (water)
Flash point: not applicable
Flammability: not applicable
Autoflammability: not applicable
Explosion properties: not applicable
Vapour pressure: approx. 23 mbar (water)
Relative density: approx 1.0
Solubility in water: insoluble but miscible in all proportions
Partition coeff. n-octanol/water: not applicable
VOC: < 10 grams per litre

10. STABILITY AND REACTIVITY

The product is stable under recommended storage conditions (Section 7).

11. TOXICOLOGICAL INFORMATION

Long term experience of this product type indicates no danger to health when properly handled under industrial conditions.

12. ECOLOGICAL INFORMATION

The product is not classified as Dangerous to the Environment according to EC Directive 93/21/EEC. These ecological data are typical values generated from a prototype of this product:

Chemical oxygen demand	1000-2000g/l
Biochemical oxygen demand, BOD ₅ at 0.1%	150-300mg/l
Elimination of dissolved organic carbon, (OECD modified Zahn-Wellens test)	98% after 2 days
Inhibition of bacterial growth, (DIN 20310)	> 125g/l
Acute fish toxicity, 48 hr, LC ₅₀	> 380mg/l

13. DISPOSAL CONSIDERATIONS

Waste product should not be discharged directly into drains or waterways without treatment. The polymer contract may be separated in a suitable coagulation and purification plant: details available on request.
Disposal of product, solid waste and packaging should always comply with local, national or EU regulations and be undertaken by an authorised contractor.

MATERIAL SAFETY DATA SHEET

14. TRANSPORT INFORMATION

The product is not classified as hazardous according to International Transport Regulations.

15. REGULATORY INFORMATION

The product is not classified as dangerous according to EC Directive 88/379/EEC (including subsequent amendments) and requires no special labelling.

All substances used in manufacture are listed to EINECS or ELINCS.

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

16. OTHER INFORMATION

This Material Safety Data Sheet conforms to EC Directives 91/155/EEC and 93/112/EC.

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.
