

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product: Monoset RX - Liquid
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

Acrylic Polymer 7%
Water Balance
To be used with Monoset RX - Powder

3. HAZARDS IDENTIFICATION

On available data the Product has no hazard classification according to EC directive 88/379/EEC (CHIP Regulations in the UK)

4. FIRST AID MEASURES

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

Skin Contact: Remove soiled clothing
Wash off with soap and water

Swallowing: May cause nausea
Give plenty of water to drink
Seek medical attention

5. FIRE FIGHTING MEASURES

Product is water based and low fire hazard. The dried polymer is combustible. All Extinguishing media are suitable. Fire fighters should wear breathing apparatus to avoid smoke inhalation.

6. ACCIDENTAL RELEASE MEASURES

Large spillages should be contained and pumped into a vessel.
Small spillages should be absorbed on sand etc for disposal (Refer to Section 13).
Prevent product entering drains or watercourses (Refer to Section 12).

7. HANDLING AND STORAGE

Handling: No special precautions needed. Ensure adequate ventilation.
Storage: Store between +5 and +25°C protected from frost and direct sunlight.
Bulk tanks should be cleaned and sterilised at least annually to prevent accumulation of bacteria.
Observe safe tank entry procedures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Good general ventilation is normally adequate. Where product is dried or sprayed local extraction is recommended.

Respiratory protection: If sprayed product use suitable respirator.
Hand protection: For frequent contact wear impermeable gloves.
Eye protection: Goggles, face visor or safety glasses recommended.
Skin protection: If severe splashing occurs wear waterproof overalls.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	milky white liquid
Odour:	faint aromatic
pH:	9.0 - 10.0
Boiling point:	approx. 100°C (water)
Flash point:	not applicable
Flammability:	not applicable
Autoignition:	not applicable
Explosive/oxidising:	not applicable
Vapour pressure:	as water
Relative density:	approx 1.0
Solubility in water:	miscible in all proportions
Partition coeff. n-octanol/water:	not applicable

10. STABILITY AND REACTIVITY

Product is stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

The product is non-toxic.
Long term experience of this product type indicates no danger to health when handling under industrial conditions.

12. ECOLOGICAL INFORMATION

The product is miscible with water and could be transported considerable distances if allowed to enter waterways. Even low concentrations in water give a pronounced white appearance.
The product will degrade only very slowly in the environment.
There is no evidence of any tendency for bioaccumulation.
In low concentrations (<100mg/litre) Monoset RX - Liquid exhibits low toxicity to fish, but in higher concentrations may be harmful to fish and aquatic life.
Low concentrations of Monoset RX – Liquid in water for sewage treatment do not affect the biomass; the polymer particles are absorbed onto the sludge and eliminated from the waste stream.
The BOD of dilute Monoset RX – Liquid is relatively low (BOD₅ approx. 100ppm at 0.1% concentration).

13. DISPOSAL CONSIDERATIONS

Waste Monoset RX – Liquid must not be discharged directly into drains or waterways without treatment.
The polymer content may be separated by coagulation and disposed of to landfill or by incineration.
Waste water containing Monoset RX – Liquid may be treated by coagulation setting, flotation or ultrafiltration. Disposal should always comply with local, national or EC regulations.

14. TRANSPORT INFORMATION

The product is not classified as dangerous for Transport.

15. REGULATORY INFORMATION

The product has no hazard classification according to EC Directive 88/379/EEC.

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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1. IDENTIFICATION OF PRODUCT AND COMPANY

Product: Monoset RX - Powder
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

A rapid setting cement to be used with Monoset RX - Liquid
The principle constituents are:-
Hydraulic powder combined with siliceous aggregate granite chips an accelerator and rheological additives.
CAS No: 65997-16-2
ECC No: 266-045-5

3. HAZARDS IDENTIFICATION

Classification: IRRITANT.
Human effects: Dry powder, has no effects on dry skin. When mixed with water, an alkaline solution is produced. A dust problem may occur in confined areas.
Environmental effects: No effects, Monoset RX - Powder is insoluble in water.

4. FIRST AID MEASURES

Skin Contact: Wash affected areas with plenty of clean water.
Eye Contact: Wash eyes immediately with plenty of clean water and if necessary, seek medical advice.
Inhalation: If irritation occurs move to fresh air. If nose or airways become inflamed, seek medical advice.
Ingestion: Do not induce vomiting. Wash out mouth with water and give patient plenty of water to drink.

5. FIRE FIGHTING MEASURES

Monoset RX - Powder is not flammable and does not support burning or dangerous synergistic reactions with other materials, provided that these substances themselves are stable.

6. ACCIDENTAL RELEASE MEASURES

On Spillage: Spilt material maybe collected for re-use, provided that no contamination has occurred.
Personal Precautions: See section 8.
Environmental Precautions: Do not empty material into drains, sewers/water courses as substance hardens when in contact with water.

7. HANDLING AND STORAGE

Storage: Store in dry conditions, preferably above ground on pallets protected by shrink wrapping. This will prevent moisture ingress and prolong shelf life.

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Handling: Wear personal protective equipment and clothing to avoid contact with the skin and eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupation Exposure Standards (OES), 8 hours.
Time Weighted Average (TWA).

Total Inhalable Dust: 10mg/m³.
Total Respirable Dust: 5mg/m³.

Personnel protection: Dust proof goggles should be worn whenever there is a risk of powder or wet mix entering the eyes.

Skin protection: Protective clothing should be worn, including waterproof gloves, trousers and wellington boots. Any wet material, contaminating clothing should be removed immediately and the skin washed thoroughly as well as the protective clothing/footwear.

Respiratory Protection: Suitable respiratory protection should be worn to ensure that personnel exposure is less than the OES, ie dust mask.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Dark grey granular material
Particle Size Distr:	0-4.0mm
pH Water Solution:	11.0-11.5
Bulk Density:	1100-1500kg/m ³
Flammability:	Not flammable
Explosive Properties:	Not explosive

10. STABILITY AND REACTIVITY

Conditions Contributing to:-

Chemical Instability:	None
Hazardous Decomposition Products:	None
Special Precautions:	None

11. TOXICOLOGICAL INFORMATION

The product is non-toxic.
Long term experience of this product type indicates no danger to health when handling under industrial conditions.

12. ECOLOGICAL INFORMATION

Stable in soil. No photodegradation with sunlight. When mixed with water, the increase in pH may be lethal to aquatic life.

13. DISPOSAL CONSIDERATIONS

Dispose of empty bags or material at an authorised disposal site.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport purposes.

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15. REGULATORY INFORMATION

Chemical (Hazard Information and Packaging Regulations 1993).

Classification: Irritant.

Risk Phases: None.

Safety Phases: Wear suitable protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of clean water, if necessary, seek medical advice.
After contact with skin, wash immediately with plenty of clean water.
Keep out of reach of children.

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.