

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF PRODUCT AND COMPANY

Product: Monoprufe DP - Liquid  
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

Carboxylated styrene butadiene polymer 23%  
Water Balance

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### 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)

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### 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

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### 5. FIRE FIGHTING MEASURES

The product is an aqueous dispersion and is not combustible.

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### 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.

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### 7. HANDLING AND STORAGE

Handling: No special precautions needed with normal housekeeping.  
Storage: Store between +5 and +35 °C, 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 microorganisms.  
Observe safe tank entry procedures.

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### 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, eg 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.

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### 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:	< 250 grams per litre

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### 10. STABILITY AND REACTIVITY

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

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### 11. TOXICOLOGICAL INFORMATION

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

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### 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 <sub>5</sub> 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 <sub>50</sub>	> 380mg/l

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### 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.

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## 14. TRANSPORT INFORMATION

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

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## 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: Waterproofing sealers

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## 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.

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## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF PRODUCT AND COMPANY

Product: Monoprufe DP - Powder  
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

Composition: Portland cement based fibre reinforced together with fine filler and additive.

Hazardous Ingredients	Symbol	Risk Phrases	CAS No	%
Portland cement	Xi	R36/37/38	65997-15-1	>30 <60

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### 3. HAZARDS IDENTIFICATION

Irritant to eyes, respiratory system and skin.

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### 4. FIRST AID MEASURES

Eyes: Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention immediately.

Skin: Remove contaminated clothing. After contact with skin wash immediately with plenty of clean water. Seek medical attention if irritation persists.

Inhalation: Remove from exposure, rest and keep warm and obtain medical attention immediately.

Ingestion: Wash out mouth with water. Do NOT induce vomiting. Obtain medical attention.

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### 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Will not support combustion. Compatible with all standard fire fighting equipment.

Special Exposure Hazards: None.

Special Protection Equipment: None.

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### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing, gloves and eye/face protection.

Environmental Precautions: Prevent entry into drains, sewers and water courses.

Cleaning up Methods: Carefully sweep or vacuum up the product and transfer to marked containers to await disposal. Wash away any residue with plenty of water.

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### 7. HANDLING AND STORAGE

Handling: Avoid creating dust. Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid skin and eye contact.

Storage: Store in dry frost free conditions below 35°C.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupation Exposure Limits:-

Substance	8 hour TWA	Source/Other Information
Powdered filler:		
total inhalable dust	10 mg/m <sup>-3</sup>	EH40
respirable dust	5 mg/m <sup>-3</sup>	
Portland cement:		
total inhalable dust	10 mg/m <sup>-3</sup>	EH40
respirable dust	5 mg/m <sup>-3</sup>	

Further information is given in guidance note EH44 - dust in the workplace.

**RESPIRATORY:** Normal conditions of ventilation are usually adequate. Wear a fine particle mask or use local ventilation as necessary when mixing in confined areas with inadequate ventilation or whenever there is a risk of the exposure limited being exceeded. This applies not only to the user, but all people who cannot be vacated from the work area.

**HAND:** Use heavy duty gloves. Barrier creams may help to protect exposed areas but are not suitable for full physical protection. They should not be applied once exposure has occurred.

**EYE:** Eye protection designed to protect against liquid splashed, conforming to BS2092 Chemical Grade, should be worn when handling to dry powder or when there is risk of mixed material entering the eye. Eye protection is essential when handling alkaline material.

**SKIN:** Wear suitable overalls. Remove grossly contaminated clothing and wash skin with plenty of clean water. Practice good personal hygiene.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light grey powder
Odour:	Odourless
Bulk Density:	850 - 1200kg/m <sup>3</sup>
Solubility in Water:	Insoluble
VOC:	< 250 grams per litre

### 10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions to Avoid:	Exposures to air. Contamination with water.
Materials to Avoid:	Strong acids.

Hazardous Decomposition Product: None.

### 11. TOXICOLOGICAL INFORMATION

#### Health Effects

On Eyes: Risk of serious damage to eyes.

On Skin: Irritation. See "chronic" effects.

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- By Inhalation: Dust nuisance. Prolonged exposure to dust may cause irritation to the respiratory system.
- By Ingestion: May cause irritation to mouth, throat and digestive tract.
- Chronic: Cement, cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

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### 12. ECOLOGICAL INFORMATION

Product should not be disposed off into rivers or other water courses without pre-treatment. Measures should be taken to prevent the release of dust to the environment. Appropriate additions of low concentrations to biological water treatment plant are not expected to cause any disturbances. Attention must be paid to local water treatment regulations.

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### 13. DISPOSAL CONSIDERATIONS

The product is not classified as hazardous waste and is suitable for controlled waste site disposal. Do not allow into water courses or dispose of where ground or surface waters may be affected.

**DISPOSAL MUST BE IN ACCORDANCE WITH LOCAL AND NATIONAL LEGISLATION**

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### 14. TRANSPORT INFORMATION

The product is not classified as dangerous for Transport.

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### 15. REGULATORY INFORMATION

#### **Hazard Label Data:-**

Names Ingredients: cement powders

Symbol: Xi

Risk Phrases: Irritating to eyes, respiratory system and skin.

Safety Phrases: Do not breath dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. Occupational exposure limits and standards are advised in Publication EH40 from the HSE for the purpose of regulations 7(1) of the COSHH regulations.

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

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### 16. OTHER INFORMATION

Training Advice: The user should be trained to handle the products to avoid the creation of dust and be fully aware of the reactions and hazards. The normal precautions relating to handling chemicals must be observed.

Recommended Uses: As a damp proof membrane when used with Monoprufe Liquid.

Data Sources: EH40/94 Occupational Exposure Limits 1991.  
HSE Guidance Note EH44; Dust in the Workplace: General Principles of Protection COSHH Regulations 1988.