

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

Product: Ronagrout PG Cartridge  
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**

<u>COMPONENTS</u>	<u>% W/W</u>	<u>CAS#</u>	<u>TWAEV</u>
Benzoyl Peroxide	0.6	94-36-0	5 mg/m <sup>3</sup>
Calcium Carbonate	81	471-34-1	10 mg/m <sup>3</sup>
Silica Fumes	3.5	7631-86-9	3 mg/m <sup>3</sup>
* Styrene monomer	7	100-42-5	213 mg/m <sup>3</sup>

Balance is non-hazardous non-Whmis controlled components

\* With products use, most of the styrene monomer is reacted.

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**3. HAZARDS IDENTIFICATION**

Toxicity Date : Estimated acute LD50 - > 5,000 mg/kg (Rat, Oral)  
Estimated acute LC50 - > 2,800 ppm/4h (Rat, Inh)

Over exposure to styrene monomer has apparently been found to cause liver abnormalities, kidney damage and lung damage in laboratory animals. The IARC has classified styrene monomer as possibly carcinogenic to humans. Benzoyl peroxide has been found to have skin tumor promoting activities.

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**4. FIRST AID MEASURES**

Ventilation : General ventilation is normally sufficient in use of cartridges.  
Maintain exposure below TLV(S).

Respiratory Protection : Normally not necessary, if particulate matter is generated, wear an organic vapour respirator approved for styrene vapours with sufficient oxygen. Engineering or administrative controls should be implemented to reduce exposure.

Protective Gloves : Wear resistant gloves such as polyethylene, polyvinyl alcohol, polyvinyl chloride, neoprene, etc.

Eye Protection : Wearing chemical splash goggles in compliance with OSHA regulations are advised, however, OSHA regulations also permit other types of safety glasses. (Consult your safety equipment supplier for further information).

Other Protective Clothing : To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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**5. FIRE FIGHTING MEASURES**

Flash Point	:	37c (98.6F), (closed cup method)
Flammable Limits	:	Lower 1 % - upper 6.2%
Auto Ignition Temperature	:	> than 57c (135F)
Fire and Explosion Hazards	:	Addition of water may cause frothing. Use self contained breathing apparatus. Avoid vapours generated on combustion of resin cartridges.
Extinguishing Media	:	Contain spill. Cover with extinguishing agent. Use water fog to cool fire exposed containers as a protective screen. Avoid collection of water fog into pools to avoid spreading. Foam or dry chemical.

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**6. ACCIDENTAL RELEASE MEASURES**

Personal protection - refer to Section 8.  
Prevent the product from entering soil, natural waters and drains.  
Spillages should be covered with an absorbent material. Remove all sources of ignition  
For disposal methods refer to Section 13.

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**7. HANDLING AND STORAGE**

Store in a cool, well ventilated area. Wash hands after handling and before eating. Avoid contact with eyes, skin or clothing. Do not breathe dust, vapour, gas or mist.  
Launder work clothes frequently. Discard saturated leather goods. Keep product away from heat, sparks and open flame. Dispose of any ruptured cartridges promptly. Since emptied containers may retain product residues, (vapour, liquid, and /or solid), all hazard precautions given in the data must be observed for the container. Remove empty containers from the work site. Explosion proof equipment is recommended.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****CONTROL MEASURES**

Use only in well ventilated areas.

**PERSONAL PROTECTION**

Respiratory Protection: Use approved organic vapour respirator when vapour concentrations exceed recommended exposure limits.

Ventilation: General (natural or mechanically induced) fresh air movements that maintain vapor concentrations below recommended exposure limits.

Eye Protection: Safety glasses (Side shields recommended).

Protective Gloves: Impermeable (Neoprene, PVC or rubber).

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point	:	-31c (-23F)
Boiling Point	:	145c (293F)
Molecular Weight	:	Not applicable
Specific Gravity	:	2.11 at 20c (68F) (H O = 1.0)
Vapour Pressure	:	16mm Hg at 20c (68F)
Vapour Density	:	3.6 (Air-1)
Solubility in H O	:	Nil

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% Volatiles	:	9% at 20c (68F)
Evaporation rate	:	0.3 (Butylacetate = 1)
Corrosiveness to Common Metals	:	Not corrosive
PH	:	7.5
Odour Threshold	:	1ppm at 20c (68F)
Odour	:	Sweet aromatic smell
Physical State	:	Low Viscosity Thixotropic material
Appearance and Colour of Cartridge	:	Sausage shaped cartridge, black in colour – with a white, red or green stripe along the length of the cartridge
VOC	:	< 250 grams per litre

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**10. STABILITY AND REACTIVITY**

Stability	:	Stable at normal temperatures and storage conditions.
Conditions Contributing to Instability	:	Heat, contamination, ignition sources.
Materials to Avoid	:	Strong acids, strong alkalis, strong oxidizers, amines, polymerization accelerators.
Hazardous Decomposition Products:	:	CO,SO,NO, Flammable hydrocarbons, smoke on combustion.

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**11. TOXICOLOGICAL INFORMATION**

Health Effects	:	
On Eyes:	:	Causes Eye Burns.
On Skin:	:	May cause sensitisation by skin contact, may cause allergic skin condition..
By Inhalation:	:	Vapours can cause headache, nausea, dizziness, fatigue, drowsiness and can have a narcotic effect if inhaled. May cause allergic respiratory condition
By Ingestion:	:	May cause irritation or burns of mouth, throat and digestive tract.
Chronic:	:	Repeated and prolonged skin contact may lead to skin disorders.

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**12. ECOLOGICAL INFORMATION**

Liquid with moderate mobility.	:	
Water hazard class:	:	2 (hazardous)
Behavior in sewage plants:	:	n/a
Toxicity to fish:	:	LC50 Leuciscus idus 35 mg/l/48h (Styrene)
Toxicity to bacteria:	:	EC10 Pseudomonas putida250µ1/1/18h (Styrene)

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**13. DISPOSAL CONSIDERATIONS**

Disposal must be in accordance with local and national legislation.  
Dispose of through an authorised waste contractor to a licensed site.

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## 14. TRANSPORT INFORMATION

Not regulated as a hazardous material  
NR CAN / Canmet / TDG

Shipped 60 cases per pallet or in smaller quantities.

Individual cases can be ordered in polyethylene bags for wet environments. Specific set times can be custom colour coded to suit customer requirements. DO NOT STACK PALLETS. Keep out of the sun.

Cartridges are not affected by freezing, however, sufficient time for the product to reach room temperature is required before use.

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15. REGULATORY INFORMATION

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