MATERIAL SAFETY DATA SHEET

PRODUCT:	**Coolcrete Riverstone**		
MANUFACTURER:	Tile & Floor Care Chemicals CC	**Tel:**	+2711 822-6901
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1. Product Name: Coolcrete Riverstone

Physical Form:	Clear purple liquid
Colour:	Purple to Pink
Odour:	Acrid
Hazards:	Moderate
Hazard Class:	None
Intended Use:	Hard surface stain
C.A.S. Chemical Name:	Potassium Permangante Solution
Chemical Family:	Inorganic Oxidizer
Synonyms:	n/a
Empirical Formula:	n/a
Extinguishing Media	No specific recommendation. Use media to suppress surrounding fire.

2. Composition / Information on hazardous ingredients

Ingredients	**Cas No**
Potassium Permangante	7722-64-7
Water	7732-18-5

3. Hazard Identification

Routes Of Exposure:	Inhalation; Eye contact; Skin contact; Ingestion
Corrosive:	The severity of damage depends on the duration of the exposure. In general, solutions and mists with a pH of 3 or less are a significant health concern. Contact with alkali liquids will generate heat. Contact with most metals will generate flammable hydrogen gas.
Effects Of Short-Term Exposure:	
Inhalation:	Vapour can cause severe nasal irritation, sore throat, choking, coughing and difficulty breathing. Prolonged exposures can cause burns and ulcers to the nose and throat. Severe exposures for a few minutes can cause accumulation of fluid in the lungs.
Skin Contact:	Contact with liquid can cause irritation and burns. Vapour or mist may cause redness, irritation and burns if contact is prolonged.
Eye Contact:	Low concentrations of vapour or mist (10-35ppm) can be immediately irritating and result in redness. Concentrated vapour mist or splashed liquid can cause severe irritation, burns and premanent blindness.
Ingestion:	Liquid can cause corrosive burns to mouth, throat, oesophagus and stomach. Symptoms may include difficulty in swallowing intense thirst, nausea, vomiting, diarrhoea and in severe cases, collapse and death. Small amounts of acid which enter the lungs during ingestion or vomiting (aspiration) can cause serious lung injury and death.
Effects Of Long-Term Exposure:	Repeated and prolonged exposure to low concentrations of mist or vapour can cause discolouration and damage to tooth enamel, bleeding of the nose and gums, gastrointestinal symptoms, and chronic bronchitis and gastritis. Repeated exposure to low concentrations of liquid, mist or vapour can cause redness, swelling, sensitisation, and pain (dermatitis) Metallic taste and garlic breath are signs of selenium absorption. No evidence of carcinogenicity in human studies. This product does not accumulate in the body.
Medical Conditions Aggravated By Exp:	Pre-existing respiratory and skin disorders.

4. First Aid Measures

Eye Contact:	immediately flush contaminated eye(s) with lukewarm, gently running water for at least 30 minutes while holding the eyelid open. Take care not to rinse contaminated water into a non-affected eye. Neutral saline solution may be used for flushing if available. Do not interrupt flushing - keep emergency vehicle waiting if necessary. If irritation persists, repeat flushing. transport victim to an emergency medical facility.
Skin Contact:	Avoid direct contact. Wear impervious protective gloves if necessary. Immediately flush contaminated areas with lukewarm gently running water for at least 20 minutes. Under running water, remove contaminated clothing, shoes and leather goods such as watchbands and belts. Do not interrupt flushing - have emergency vehicle wait if necessary. Transport victim to emergency medical facility. Decontaminate clothing, shoes, and leather goods before reuse or discarding.
Inhalation:	Take precautions to ensure your own safety before attempting rescue. Wear appropriate personal protective equipment and use the "buddy" system. Remove victim to fresh air. If breathing has stopped, begin artificial respiration, or if the heart has stopped, begin cardiopulmonary resuscitation (CPR) immediately. Oxygen should be administered by trained personnel. Ensure victim is completely at rest - allow no physical exertion. Symptoms may be delayed for up to 48 hours. Immediately transport victim to an emergency medical facility.
Ingestion:	Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or is convulsing. Have victim rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink 300ml of water. If milk is available administer after the water. If vomiting occurs naturally, have the victim lean forward to reduce risk of aspiration repeat administration of water. Immediately transport to emergency medical facility.
General Comments:	Provide general supportive measures (comfort, warmth,rest). Seek medical attention for all exposures except minor instances of inhalation or skin contact. First-aid procedures should be reviewed by appropriate personnel familiar with hydrochloric acid and its conditions of use in the workplace.

5. Fire Fighting Measures:

Flash Point	n/a
Auto-Ignition Temperature:	n/a
Upper Explosion Limit (UEL):	n/a
Lower Explosion Limit (LEL):	n/a
Sensitivity To Impact:	Not Sensitive
Sensitivity To Static Discharge:	Not Sensitive
Hazardous Combustion Products:	None. See hazardous decomposition products in section 10 for information on thermal decomposition.
Extinguishing Media:	No Specific recommendation. Use media to suppress surrounding fire.
Fire Fighting Instructions:	Wear adequate personal protective equipment. Use water to keep fire-exposed containers cool to prevent rupture. Use water spray or fog to reduce or direct vapours. Do not direct water at source of leak. Trained professional may neutralise a spill. Contact with common metals produces hydrogen gas that may form explosive mixtures in air.
NFPA Hazard Index:	
Health:	3 - Very short exposure could cause serious temporary or residual injury requiring immediate attention.
Flammability:	0 - Will not burn
Reactivity:	1 - Normally stable but can become unstable at elevated temperatures and pressures & may react non-violently with water.
Specific Hazards	Corrosvie; Oxidizer

6. Accidental Release Measures

Personal Protection:	Evacuate unnecessary personnel from spill area and keep unprotected persons upwind. Wear appropriate personal protective equipment. Ventilate area. Vapour is heavier than air and will collect in low areas. Do not touch spilled hydrochloric acid.
Environmental Precautions:	Implement spill control plan. Stop or reduce leak if safe to do so. Prevent from entering sanitary or storm sewers, waterways or confined spaces. Use inert materials such as earth or sand to form a dike.
Remedial Measures:	Resrtict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Use all appropriate personal protective equipment.
Small Spills:	Absorb with neutralising materials such as soda ash or lime and collect in sealed containers. Flush area with water.

Large Spills:	Contain and collect spilled material if possible. Notify government occupational health and safety environmental authorities as per applicable regulations.

7. Handling and Storage

Storage:
Store in cool, dry, well ventilated area, out of direct sunlight and away from heat sources.
Store away from incompatible materials such as oxidising materials, reducing materials and strong bases.
Keep storage area separate from populated work areas.

Handling:
Ensure adequate ventilation.
Prevent release of vapour or mist into workplace air.
Have emergency equipment readily available.
When diluting, slowly add acid to the water to avoid boiling or splattering.
Keep containers closed when not in use.
Wash face and hands thoroughly after handling and before eating, drinking or using tobacco products.

8. Exposure Controls/Personal Protection

Engineering Controls: Use general or local exhaust ventilation to maintain exposure below the exposure limits.

Respiratory Protection: If respiratory protection is required, NIOSH recommends for hydrogen chloride in air:
Up to 50ppm - chemical cartridge respirator with hydrogen chloride cartridge(s). Powered air purifying respirator with appropriate cartridge(s), supplied air respirator (SAR), or full face piece.
SCBA IDLH Conditions (50ppm) or planned entry in unknown concentrations: positive pressure, full face pieceSCBA, or positive pressure full face piece SAR with an auxiliary positive pressure SCBA.
Escape: Gas mask with canister, or escape type SCBA.
Note: Air purifying respirators do not protect against oxygen deficient atmospheres.

Skin Protection: Wear impervious gloves and boots and/or other protective clothing according to circumstances.

Eye And Face Protection: Eye protection is required. Chemical safety goggles are recommended.
The wearing of contact lenses is not recommended.

Footwear: As required by worksite rules.

Other: Have a safety shower and eye wash station readily available in the immediate work area.

9. Physical and Chemical Properties

Appearance:	Clear black liquid
Colour:	Pink to Purple
State:	Liquid
Odour Characteristic:	Acrid Odour
pH:	7,5-8,5
Boiling Point:	108°C
Freezing Point:	0°C
Solubility in Water:	Completely soluble in water.
Critical Temperature:	n/a
Specific Gravity:	1,018-1,026

10. Stability and Reactivity

Chemical Stability: Stable. Avoid heat - releases toxic gases with heat.

Incompatibility: Very corrosive to most metals, producing flammable hydrogen gas.
Reacts with bases to produce heat. Reacts with reducing agents to produce heat, fire and flammable hydrogen gas.
Reacts with oxidising agents to produce heat. Reacts with carbides, turpentine, phosphorus hydrogen sulphide, organic materials, and alkalis. Contact with explosives may cause detonation. Reacts with cyanides to produce toxic cyanide gas, and sulphides to produce toxic hydrogen sulphide gas.

Hazardous Decomposition Product: Thermal decomposition liberates toxic corrosive fumes of hydrogen chloride, chlorine, manganese, iron and chromium oxides.

Hazardous Polymerisation: Will not occur.

11. Toxicological Information:

Acute Exposure:	The theoretical LD 50 (rat/oral) is >3000mg/kg.
Exposure Limits:	see section 2
Irritancy:	see section 3
Sensitisation:	see section 3
Carcinogenicity:	no data
Teratogenicity	no reports for ingestion or inhalation of copper compounds
Reproductive Toxicity:	n/a
Synergistic Products:	none reported

12. Ecological Information:

Environmental Toxicity:	Moderate toxicity to aquatic life
Biodegradability:	Expected to bio accumulate

13. Disposal Considerations:

Place used contaminated material and packaging into suitable containers and dispose of as controlled waste.
Review and follow all local and state regulations.

14. Transport Information:

UN No:	1490
IMDG Packaging Group:	II
Marine Pollutant:	Yes
Class:	5.1
Subsidary Risks:	n/a
Tremcard No:	

15. Regulatory Information:

EEC Hazard Classification: 5.1

Risk Phrases: 8: Contact with combustible material may cause fire.
22: Harmful if swallowed
50/53: Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment

Safety Phrases: (2) Keep out of reach of children
60: This material and its container must be disposed of as hazardous waste
61: Avoid release into environment; refer to special instructions / material safety data sheet.

National Legislation: SIN No 1792 Non Hazardous

16. Other Information:

This material safety data sheet was prepared using information provided by Technical Finishes.
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