

Material Safety Data Sheet

1. Product And Company Identification

Product Code CHEM02
Product Name PERMACOLOUR Chemical Stain - Caramel
Manufacturer New Zealand Decorative Concrete Supplies Ltd
Address 42 A Egmont Road, Waiwhakaiho, New Plymouth
Phone 06 755 3320
Fax 06 755 0054
Email info@permacolour.co.nz
Emergency Telephone 0274 446 023
Last Updated April 2010

2. Composition/Information on Ingredients

Chemical Name	CAS No	ACGIH TLV	OSHA PEL	STEL
Ferrous Chloride	7758-94-3	1mg/m ³	1mg/m ³	N/A
Ferric Chloride	7705-08-0	N/A	N/A	N/A
Hydrochloric Acid	7647-01-0	7 mg/m ³	7 mg/m ³	N/A
Water	7732-38-2	N/A	N/A	N/A

3. Hazards Identification

Emergency Overview

CORROSIVE. Contains acid. Dark liquid with sharp pungent Odour. Harmful if swallowed or inhaled. Overexposure could cause (target organ or system) damage, such as nervous system, blood disorders, liver, kidney, immune system, cardiovascular system, thyroid, testicular, or ovarian.

Signs and Symptoms of Exposure

Ingestion

When concentrated hydrochloric acid is swallowed, it causes severe burns of the mucous membranes of the mouth, oesophagus and stomach. The lips and mouth usually turn white and later brown. There is pain in the throat and stomach, difficulty in swallowing, intense thirst, nausea and vomiting, followed by diarrhea and in severe cases, by collapse and unconsciousness.

Inhalation

Inhalation of excessive concentrations of hydrogen chloride vapors immediately produces severe irritation of the upper respiratory tract, resulting in coughing, burning of the throat, and choking sensation. Reactions encountered in man have usually been limited to inflammation and occasional ulceration of the nose, throat and larynx. If inhaled deeply, edema of the lungs may occur. Prolonged or repeated contact may cause perforation of the nasal septum.

Eyes

Contact of the eyes with hydrogen chloride, either as a gas or in solution, rapidly causes severe irritation and painful burns of the eyes and eyelids. If the acid is not quickly removed by thorough irrigation with water, there may be prolonged or permanent visual impairment or total loss of sight. Prolonged or repeated contact may cause conjunctivitis.

Skin

Absorption of concentrated solutions is destructive to clothing and on contact with skin, causes severe burns unless promptly washed off. Repeated skin contact with dilute solutions may lead to the development of dermatitis. Exposure to the concentrated vapor of an hydrous hydrogen chloride may also result in burns or dermatitis. Prolonged or repeated contact may cause ulcerations.

Potential Environmental Hazards

N/A

4. First Aid Measures

Ingestion

DO NOT INDUCE VOMITING. If the patient has swallowed Hydrochloric Acid and is conscious, give large amounts of limewater or milk of magnesia. Water should be given if neither of these is available. Do not give sodium bicarbonate. GET MEDICAL ATTENTION IMMEDIATELY.

Inhalation

If symptoms develop, immediately move individuals away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. GET MEDICAL ATTENTION IMMEDIATELY.

Eyes

DO NOT RUB. Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the irrigation to ensure flushing of the entire surface of the eye and lids with water. GET MEDICAL ATTENTION IMMEDIATELY. Do not attempt to neutralize the acid with chemicals. Oils or ointments should not be used unless directed by a physician. Continue the irrigation for an additional 15 minutes if a physician is not available.

Skin

Immediately flush affected areas with water. Remove contaminated clothing under the shower. Continue washing with water - do not attempt to neutralize with chemical agents. Severe or extensive burns may be caused by Hydrochloric Acid producing shock symptoms (rapid pulse, sweating and collapse). In these cases keep the patient on his back and comfortably warm. GET MEDICAL ATTENTION IMMEDIATELY. Do not apply oils or ointments unless directed by a physician.

5. Fire Fighting Measures

Flash Point	N/A	Lower Explosive Limit	N/A
--------------------	-----	------------------------------	-----

Auto Ignition Temperature	N/A	Upper Explosive Limit	N/A
----------------------------------	-----	------------------------------	-----

Unusual Fire Explosion Hazards

Releases Hydrogen Chloride Gas when heated. Also reacts with most metals to release Hydrogen Gas, which can form explosive mixtures with air.

Extinguishing Media

Use water fog, foam, or dry chemical.

Special Fire Fighting Procedures

Evacuate hazard area of unprotected personnel. Wear full protective gear, including a NIOSH-approved, positive pressure, self-contained, breathing apparatus. Cool fire-exposed containers with water. In case of large fires, also cool surrounding equipment and structures with water. If a leak or spill has not ignited, use water spray to disperse the vapors. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

6. Accidental Release Measures

Approach release from upwind. Stop or control leak using special protective clothing and positive pressure self-contained breathing apparatus. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Control runoff and isolate discharge material for proper waste-disposal method. Do not use metal containers to recover material. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Use non-leaking containers, seal tightly, and label properly. Dispose of in accordance with applicable local, county, state, and federal regulations.

7. Handling And Storage

Safe Handling and Storage

CAUTION: CORROSIVE. Store away from strong oxidizing agents, in a cool, dry place that is away from direct sunlight. Keep containers closed. Do not let product freeze. Keep away from heat, sparks, and open flame. DO NOT WELD or drill on or near containers. Even empty containers can contain explosive vapors or residue. Material containers may be hazardous when emptied, since containers retain residues (vapor, liquid, and/or solids). Observe all hazard precautions given in this data sheet.

8. Exposure Controls/Personal Protection

Engineering Controls

Provide mechanical local exhaust ventilation to prevent release of mist in work environment. If ventilation is inadequate or not available, use acid cartridge or canister with full face-piece.

Personal Protective Equipment

Use approved acid/gas cartridge or canister with full-face piece unless break through occurs, then use airline supplied or self-contained breathing apparatus. Use impervious neoprene or rubber gloves. Use cup-type chemical goggles or full face shield.

Other Protective Clothing Equipment

An eyewash station and a safety shower should be available.

General Work Practices Hygiene Considerations

Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Use good hygiene when handling this product. Cleanse skin thoroughly after handling and before eating or drinking. Product is easily removed with waterless, hand cleaners followed by washing thoroughly with soap and water. Remove contaminated clothing and launder or dry-clean before reuse. Discard contaminated shoes and thoroughly clean and dry before reuse.

Exposure Guidelines

Please see section 2.

9. Physical And Chemical Properties

Physical State	Liquid	Appearance/Colour/Odour	Dark liquid/
VOC	N/A		Sharp pungent Odour
Melting Point/Range	N/A	Boiling Point/Range	N/A
Solubility in Water	Soluble	How to Detect this Compound	Odour
pH	N/A	Specific Gravity (Water = 1)	1.30 +/- .03
Molecular Weight	N/A	Percent Volatiles	N/A
Vapor Pressure (mmHg)	N/A	Vapor Density (Air = 1)	N/A

10. Stability And Reactivity

Stability	Stable
Hazardous Polymerization	Will not occur
Conditions To Avoid	Never add water to acid. Addition to water releases heat and will result in violent foaming and spattering.
Materials To Avoid	Strong alkalies or alkali metals.
Hazardous Decomposition Products	May evolve highly toxic chloride and chlorine fumes.

11. Toxicological Information

N/A

12. Ecotoxicological Information

N/A

13. Disposal Considerations

Use non-leaking, non-metal containers, seal tightly and label properly. Dispose of in accordance with applicable local, county, state, and federal guidelines. Do not dispose in streams, wells, lakes, rivers, oceans, or sewers.

14. Transport Information

DOT Proper Shipping Name Hydrochloric Acid

DOT Hazard Class ID Number 8, UN1789, III

15. Regulatory information**Reportable Quantity** N/A**NFPA Rating** (0=Insignificant, 1=Slight, 2=Moderate, 3=High, 4=Extreme)**Health** 3**Flammability** 0**Reactivity** 0**Carcinogenicity Lists No** No**NTP** Yes**IARC Monograph** Yes**OSHA Regulated** No**STATE WARNING**

California Prop 65: This product may contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Many States have adopted Federal guidelines and restrictions for hazardous chemicals. A complete list is available at www.epa.gov/ceppo/pubs/title3.pdf. Some states have expanded the Federal List and you should check with your local regulatory agency for any additional restrictions on the hazardous chemicals listed in this section.

FEDERAL WARNING

Section 313 Supplier Notification: This product contains the following toxic chemical(s) subject to the reporting requirements of SARA TITLE III, Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS No	Chemical Name	% By Weight
7647-01-0	Hydrochloric Acid	< 7

16. Other information

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure.

This MSDS has been prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200). To the best of our knowledge, the information contained herein is accurate and the information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change, PERMACOLOUR makes no warranty, either expressed or implied with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. The data on this sheet is related only to this specific material. It may not be valid for this material if used in combination with any other materials. It is the user's responsibility to determine suitability and completeness of this information with regards to a particular use. Additional information may be necessary or helpful for specific conditions and circumstances of use. Unknown hazards may exist and this material should be used with caution. PERMACOLOUR assumes no legal responsibility for use or reliance upon this data.