

Material Safety Data Sheet

IDENTITY (As Used on Label and List)

ARMOR-GUARD



Section I

Manufacture's Name Perma-Chink Systems, Inc.	Emergency Telephone Number: CHEMTREC 1-800-424-9300
Address (Number, Street, City, State, and ZIP code) 1605 Prosser Road	Telephone Number for Information: 865-524-7343
Knoxville, TN 37914	Date of Preparation 3/5/2012
Preparer's Name Sean Gahan	Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Component (Specific Chemical Identity, Common Name(s))	CAS #	OSHA / PEL	ACGIH TLV	Other Limit Recommended	% (optional)
Disodium Octaborate Tetrahydrate	12280-03-4	5 mg/m ³ (respirable dust) 15 mg/m ³ (total dust)	10 mg/m ³		

Section III – Physical/Chemical Characteristics

Boiling Point: N/A	Specific Gravity (H ₂ O = 1) 2.25
Vapor Pressure (mm Hg.) N/A	Melting Point: 815°C % Volatile (Volume) N/A
Vapor Density (Air = 1) N/A	Evaporation Rate (Butyl Acetate = 1) N/A
Solubility in Water 9.7 % @ 20°C	
Appearance and Odor White, odorless, crystalline solid	

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limitations N/A	LEL N/A	UEL N/A
Extinguishing Media Any fire extinguishing media may be used on nearby fires.			
Special Fire Fighting Procedures	NFPA Rating: Health = 1, Flammability = 0, Reactivity = 1		
Unusual Fire and Explosion Hazards Product itself is a flame retardant.	Reactions with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas, which could create an explosive hazard.		

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	✓	None Known
Incompatibility (Materials to Avoid)	Reactions with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas, which could create an explosive hazard.		
Hazardous Decomposition or Byproducts	None known		
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	✓	None Known

Section VI – Health Hazard Data

Routes of Entry Inhalation? Yes Skin? Yes Ingestion? Yes Eye Contact? Yes

Health Hazards (Acute and Chronic)

Carcinogenicity? NO

NTP? NO

IARC Monographs? NO

OSHA Regulated? NO

Signs and Symptoms of Exposure:

Symptoms of accidental exposure might include nausea, vomiting, diarrhea, delayed skin redness and peeling.

Medical Conditions: Generally aggravated by exposure.

Emergency and First Aid Procedures:

Eye contact: Flush with clean water for at least 15 minutes; seek medical attention.

Ingestion: Small amounts (one teaspoon) will cause no harm to healthy adults. If larger quantity are ingested, give two glasses of water and seek medical attention.

Skin : Non-irritating.

Inhalation: Remove to fresh air.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled

Vacuum, shovel, or sweep up and dispose in accordance with applicable Federal, State, and Local regulations.

Waste Disposal Method

Small quantities can usually be disposed of at landfill sites; however, dispose of material in accordance with all applicable Federal, State, and Local regulations.

Precautions to be taken in Handling and Storing

No special precautions. Store in a dry indoor location.

Other Precautions

Section VIII – Control Measures

Respiratory Protection (Specify Type)

None if below PEL limits

Ventilation	Local Exhaust Yes	Special
	Mechanical (general)	Other
Protective Gloves	None required for normal use	Eye Protection Goggles if extremely dusty.

Other Protective Clothing or Equipment

None required for normal use

Work/Hygenic Practices

The information contained herein is, to the best of Perma-Chink Systems, Inc. knowledge, accurate as of the data indicated. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished on the condition that the person receiving it shall make his own determination as to the suitability of the material for his particular purpose and on the condition that he assumes the risk of his use thereof.