

MATERIAL SAFETY DATA SHEET

Section 1 - IDENTIFICATION

Product Name: PRO BOND™

MSDS Information:

This MSDS was produced in January 2006 and supercedes and replaces any prior versions.

Emergency Contact Information:

Professional Fluid Services, LLC, 24 Hour Telephone Number: 888-862-7177

Product Code:

Standard Industrial Classification: 3241

Chemical Family:

Calcium compounds. Calcium Silicate compounds and other calcium compounds containing iron and aluminum make up the majority of this product. Major compounds:

| | |
|-----------------------------|----------------|
| TRICALCIUM SILICATE | CAS#12168-85-3 |
| DICALCIUM SILICATE | CAS#10034-77-2 |
| TRICALCIUM SILICATE | CAS#12042-78-3 |
| TETRACALCIUM ALUMINOFERRITE | CAS#12068-35-8 |
| CALCIUM SULFATE DIHYDRATE | CAS#7778-18-9 |

Chemical Name and Synonyms:

Portland cement. Also known as hydraulic cement.

Formula:

This product consists of finely ground class "H" Portland cement clinker mixed with additional proprietary additives.

Trace Elements: Portland cement is made from materials mined from the earth and is processed using energy provided by fuels; and therefore may contain trace amounts of naturally occurring materials with might be detected during chemical analysis. For example: Portland cement may contain up to 0.75% insoluble residue, of which <0.1% may be free crystalline silica. Other trace constituents may include potassium and sodium sulfate compounds, chromium compounds, and nickel compounds.

Supplier:

PROFESSIONAL FLUID SERVICES, LLC
P.O. Box 80293
Lafayette, Louisiana 70598

Section 2 - COMPONENTS

Hazardous Substances

Portland Cement Clinker (CAS#65997-15-1)
Nominal 95% by weight

**OSHA PEL
(8-Hour TWA)**
50 million particles/ft³

**ACGIH TLV-TWA
(1995-1996)**
10 mg total dust /m³

Calcium Sulfate (CAS#7778-18-9)
[Gypsum (CAS#13397-24-5)]
Nominal 5% by weight

5 mg respirable dust/m³
10 mg total dust/m³

10 mg total dust/m³

Calcium Oxide (CAS#1306-78-8)
(Free Lime)
<4% by weight

5 mg/m³

2 mg/m³

Magnesium Oxide (CAS#1309-48-4)
<5% by weight

15 mg total dust/m³

10 mg total dust/m³

Section 3 - HAZARDS IDENTIFICATION/TOXICOLOGICAL INFORMATION

Emergency Overview:

Pro Bond™ is a light gray powder that poses little immediate hazard. A single short term exposure to the dry powder is not likely to cause serious harm. However, exposure of sufficient duration to wet Pro Bond™/Portland Cement can cause serious, potentially irreversible tissue (including skin or eye) destruction in the form of chemical (caustic) burns, including third degree burns. The same type of tissue destruction can occur if wet or moist areas of the body are exposed for sufficient duration to dry Pro Bond™/Portland Cement.

Potential Health Effects:

Potential effects resulting from eye contact:

Exposure to airborne dust may cause immediate or delayed irritation or inflammation. Eye contact by larger amounts of dry powder or splashes of wet Pro Bond™/Portland Cement may cause effects ranging from moderate eye irritation to chemical burns and blindness. Such exposures require immediate first aid (see section 4) and medical attention to prevent significant damage to the eye.

Potential effects resulting from skin contact:

Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure. Consequently, the only effective means of avoiding skin injury or illness involves minimizing or avoiding skin contact, particularly contact with wet Pro Bond™/Portland Cement. Persons exposed to wet Pro Bond™/Portland Cement may not feel discomfort until hours after the exposure has ended and significant injury has occurred.

Exposure to dry Pro Bond™/Portland Cement may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Dry Pro Bond™/Portland Cement contacting wet skin or exposure to moist or wet Pro Bond™/Portland Cement may cause more severe skin effects including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of (caustic) chemical burns.

Some individuals may exhibit an allergic response upon exposure to Pro Bond™, possibly due to trace amounts of chromium. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers. Persons already sensitized may react to their first contact with this product. Other persons may first experience this effect after years of contact.

Potential effects resulting from inhalation:

Pro Bond™/Portland Cement may contain trace amounts <0.1%> of free crystalline silica. Prolonged exposure to respirable free crystalline silica may aggravate other lung conditions. It also may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease.

Exposure to Pro Bond™/Portland Cement may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system. It may also leave unpleasant deposits in the nose.

Potential effects resulting from ingestion:

Although small quantities of dust are not known to be harmful, ill effects are possible if larger quantities are consumed. Pro Bond™/Portland Cement should not be eaten under any circumstances.

Carcinogenic Potential:

Pro Bond™/Portland Cement is not listed as a carcinogen by IARC, NTP, or OSHA. It does, however, contain trace amounts <0.1%> of substances listed as carcinogens by some of these organizations. Crystalline silica is now classified by IARC as a known human carcinogen (Group 1). NTP has characterized respirable crystalline silica as "reasonably anticipated to be (a) carcinogen".

Medical Conditions Which May Be Aggravated By Inhalation or Dermal Exposure:

- Pre-existing upper respiratory and lung diseases.
- Unusual (hyper) sensitivity to hexavalent chromium (chromium +6) salts.

Section 4 - FIRST AID

Eyes

Immediately flush eyes thoroughly with fresh water. Continue flushing eyes for at least 15 minutes, including under lids, to remove all particles. Call a physician immediately.

Skin

Wash skin with cool water and pH neutral soap or a mild detergent intended for use on the skin. Seek medical treatment in all cases of prolonged exposure to wet Pro Bond™, Pro Bond™ mixtures, liquids from fresh Pro Bond™ products or prolonged wet skin exposures to dry Pro Bond™.

Inhalation of Airborne Dust

Remove to fresh air. Seek medical help if coughing and other symptoms do not subside. (Inhalation of gross amounts of Pro Bond™ requires immediate medical attention.)

Ingestion

Do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

Section 5 - FIRE & EXPLOSION DATA

| | |
|------------------------------------|---|
| Flash Point | None |
| Lower Exposure Limit | None |
| Upper Exposure Limit | None |
| Auto Ignition Temperature | Not Combustible |
| Extinguishing Media | Not Combustible |
| Special Fire Fighting Procedures | None (Although Pro Bond™ poses no fire-related hazards, a self contained breathing apparatus is recommended to limit exposure to combustion products when fighting a fire.) |
| Unusual Fire and Explosion Hazards | None |

Section 6 - EXPOSURE CONTROL/PERSONAL PROTECTION

Skin Protection

Prevention is essential to avoiding potentially severe skin injury. Avoid contact with unhardened (wet) Pro Bond™. If contact occurs, promptly wash affected area with soap and water. Where prolonged exposure to unhardened Pro Bond™ might occur, wear impervious clothing and gloves and boots to eliminate skin contact.

Respiratory Protection

Avoid action that cause dust to become airborne. Use local or general ventilation to control exposure below applicable exposure limits. Use NIOSH/MSHA approved respirators in poorly ventilated areas when dust causes discomfort or irritation, or where there is an applicable exposure limit (Advisory: Respirators and filters purchased after July 10, 1998 must be certified under 42 CFR 84).

Ventilation

Use local exhaust or general dilution ventilation to control exposure below applicable limits.

Eye Protection

When engaged in activities where Pro Bond™ dust or wet Pro Bond™ could contact the eye, wear safety glasses with side shields or goggles. In extremely dusty environments and unpredictable environments, wear un-vented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with Pro Bond™.

Section 7 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--------------------------------|
| Appearance | Gray powder |
| Odor | No distinct odor |
| Physical State | Solid (Powder) |
| pH (in water) | 12 to 13 |
| Solubility in Water | Slightly soluble (0.1 to 1.0%) |
| Vapor Pressure | Not applicable |
| Vapor Density | Not applicable |
| Boiling Point | Not applicable |
| Melting Point | Not applicable |
| Specific Gravity (H ₂ O = 1.0) | 3.15 |
| Evaporation Rate | Not applicable |

Section 8 - STABILITY AND REACTIVITY

Stability

Stable

Conditions To Avoid

Unintentional contact with water.

Incompatibility

Pro Bond™ is alkaline, as such it is incompatible with acids, ammonium salts and aluminum metal.

Hazardous Decomposition

Will not spontaneously occur. Adding water results in hydration and produces (caustic) calcium hydroxide.

Hazardous Polymerization

Will not occur.

Section 9 - ECOLOGICAL INFORMATION

Ecotoxicity

No recognized unusual toxicity to plants or animals.

Relevant Physical and Chemical Properties

(See Sections 9 and 10)

Section 10 - DISPOSAL

Dispose of water material, including pails, accordingly to local, state and federal regulations.

Section 11 - TRANSPORTATION DATA

Hazardous Material Description/Proper Shipping Name

Pro Bond™ is not hazardous under U.S. Department of Transportation (DOT) regulations.

Section 12 - OTHER REGULATORY INFORMATION

Status Under USDOL-OSHA Hazard Communication Rule 29 CFR 1910.1200

Pro Bond™/Portland Cement is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

Status Under CERCLA/Superfund 40 CFR 117 and 302(v)

Not Listed.

Hazard Category Under SARA (Title III) Section 311 and 312

Pro Bond™/Portland Cement qualifies as a "hazardous substance" with delayed health effects.

Status Under SARA (Title III) Section 313

Not subject to reporting requirements under Section 313.

Status Under TSCA (as of May 1997)

Some substances in Pro Bond™/Portland Cement are on the TSCA inventory list.

Status Under the Federal Hazardous Substances Act

Pro Bond™/Portland Cement is a "hazardous substance" subject to statutes promulgated under the subject act.

Status Under WHMIS

Pro Bond™/Portland Cement is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products regulations (class E-corrosive material) and is therefore subject to the labeling and MSDS requirements of the workplace hazardous materials information system (WHMIS).

Section 13 - OTHER INFORMATION

Prepared By

PROFESSIONAL FLUID SERVICES, LLC
P.O. Box 80293
Lafayette, Louisiana 70598

Packaging Information

Pro Bond™ is packaged in a 6 gallon plastic pail.
Weight of Each Pail: **61 lbs Net / 66 lbs Gross**

Other Important Information

Pro Bond™ should only be used by knowledgeable persons. Inexperienced product users must obtain proper training before using this product. A key to the proper safety requires the user to recognize that Pro Bond™ chemically reacts with water, and that some of the intermediate products of this reaction pose a far more severe hazard than does Pro Bond™ itself.

While the information provided in this material safety data sheet is believed to provide a useful summary of the hazards of Pro Bond™ as it is commonly used, the sheet cannot, and does not, anticipate and provide all of the information that might be needed in every situation. In particular, the data furnished in this sheet does not address hazards that may be posed by other materials mixed with Pro Bond™.

ALL THE RECOMMENDATIONS AND SUGGESTIONS HEREIN CONCERNING OUR PRODUCT ARE BASED UPON TESTS AND DATA BELIEVED TO BE RELIABLE, HOWEVER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY, TOXICITY, AND SUITABILITY FOR HIS OWN USE OF THE PRODUCT DESCRIBED HEREIN. SINCE THE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO GUARANTEE, EXPRESSED OR IMPLIED, IS MADE BY PROFESSIONAL FLUID SERVICES, LLC AS TO THE EFFECTS OF SUCH USE, THE RESULTS TO BE OBTAINED, OR THE SAFETY AND TOXICITY OF THE PRODUCT NOR DOES PROFESSIONAL FLUID SERVICES, LLC ASSUME ANY LIABILITY ARISING OUT OF USE BY OTHERS. NOR IS THE INFORMATION HEREIN TO BE CONSIDERED AS ABSOLUTELY COMPLETE SINCE ADDITIONAL INFORMATION MAY BE NECESSARY OR DESIRABLE WHEN PARTICULAR OR EXCEPTIONAL CONDITIONS OR CIRCUMSTANCES EXIST OR BECAUSE OF APPLICABLE LAWS OR GOVERNMENT REGULATIONS.