

## SAFETY DATA SHEET

### SECTION 1 Product and Company Identification

Product Name: PRO-CAST

Recommended Use: GFRC Pourable Precast Mix

Supplier: DURACO  
4645 NORTH AVE.  
OCEANSIDE, CA 92056

Emergency Contact: CHEMTREC 800-424-9300  
CONTRACT # 205539

### SECTION 2 Hazard Identification

#### Classification of substance or mixture:

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation	Category 1	H314
Skin sensitization	Category 1	H317
Serious eye damage/eye irritation	Category 1	H318
Specific target organ toxicity (single exposure)	Category 3	H335
respiratory irritation		
Carcinogenicity	Category 1A	H350

#### GHS Label Elements:

##### Hazard Symbol:



Signal Word: **Danger**

#### Label Hazard Statements:

- H314 Causes severe skin burns and eye damage.
- H317 May cause allergic skin reaction.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H350 May cause cancer through repeated inhalation.
- H372 Causes damage to respiratory system through prolonged and repeated exposure.

**Label Precautionary Statements:**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust.
- P264 Wash thoroughly after handling this product.
- P270 Do not eat, drink or smoke while handling this product.
- P271 Use only outdoors or in a well ventilated area.
- P280 Wear eye protection, protective clothing, protective gloves.
- P284 Wear respiratory protection.
- P301+330+331 IF SWALLOWED Rinse mouth. DO NOT induce vomiting. Immediately call poison center/physician.
- P303+361+353 IF ON SKIN (or hair) Immediately take off all contaminated clothing. Rinse skin with water/shower. Immediately call poison center/physician. Wash contaminated clothing before reuse.
- P304+P340 IF INHALED Remove victim to fresh air and in a position comfortable for breathing.
- P342+P313 If experiencing respiratory symptoms: Get medical attention.
- P305+P351+P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- P337+P310 If eye irritation persists: Immediately call a POISON CENTER/doctor.
- P333+313 If skin irritation or a rash occurs: Get medical attention.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container to an approved waste disposal plant.

**Other hazards which do not result in classification or are not covered by the GHS:** May form combustible dust concentrations in the air.

**Hazard Ratings**

	<i>health</i>	<i>flammability</i>	<i>reactivity</i>
<b>HMIS</b>	1	0	0
<b>NFPA</b>	1	0	0

**SECTION 3 Composition / Information On Ingredients**

This material is regulated as a mixture

<b>Ingredient</b>	<b>CAS #</b>	<b>EC#</b>	<b>% (by weight)</b>
<b>Hazardous</b>			
Portland Cement type 1	65997-15-1	ND	<53%
Crystalline silica quartz	14808-60-7	ND	<49%
Calcium Oxide	1305-78-8	ND	<2%
<b>Non hazardous</b>			
	Trade secret		<5%

The exact percentage (concentration) of composition has been withheld as a trade secret.

**SECTION 4 First Aid Measures**

**Eye Contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

**Skin Contact:** Get medical attention immediately. Heavy exposure to portland cement dust, wet concrete or

## SECTION 4 First Aid Measures

**Eye Contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

**Skin Contact:** Get medical attention immediately. Heavy exposure to portland cement dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess portland cement. Immediately wash thoroughly with luke-warm, gently flowing water and non-abrasive pH neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns. Portland cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.

**Inhalation:** Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of portland cement requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

**Ingestion:** Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

### **Most important symptoms and effects, both acute and delayed:**

**Eye contact:** causes serious eye damage.

**Inhalation:** may cause respiratory irritation.

**Skin contact:** causes severe burns. May cause an allergic skin reaction.

**Ingestion:** may cause burns to mouth, throat and stomach.

### **Over-exposure signs/symptoms:**

**Eye contact:** pain, watering and redness.

**Inhalation:** respiratory tract irritation and coughing.

**Skin contact:** pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may occur.

**Ingestion:** stomach pains.



**Potential chronic health effects:**

Long-term exposure to high concentrations of crystalline silica quartz may cause cancer. Long-term exposure to high concentrations of dust containing iron oxide can cause a benign condition termed “pulmonary siderosis.” This condition is not associated with any physical impairment of lung function.

**Note to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## SECTION 5 Fire Fighting Measures

**Extinguishing Media:** Water spray, alcohol resistant foam, Dry Chemical or CO<sub>2</sub> appropriate for surrounding materials.

**Special Hazards:** Burning produces noxious and toxic fumes. Oxides of carbon.

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** Use water spray to cool unopened containers.

## SECTION 6 Accidental Release Measures

**Personal precautions:** Avoid dust generation. Keep unnecessary and unprotected personnel away from spill. Do not touch or walk through spilled material. Put on appropriate protective equipment.

**Environmental precautions:** Avoid dispersal of spilled material and runoff from contact with soil, waterways, drains and sewers.

**Methods for clean-up:** Dry spills may be scooped up. Attempt to prevent dry product (dust) from becoming airborne. Wet product may be scraped up and placed in appropriate disposal containers. Allow wet product to dry before disposal. Do not flush down drains.

## SECTION 7 Handling and Storage

**Handling:** Avoid contact with eyes, skin, and clothing. Promptly remove dusty clothing or clothing that has become wet with the mixed product. Launder clothing before reuse. Wash thoroughly after exposure to product. Avoid formation of dust. Avoid dust deposit, remove dust regularly.

**Conditions of safe storage, including any incompatibilities:** Store product in a cool, dry, ventilated area. Prevent against physical damage and moisture. Normal temperatures and pressures do not affect the material. Wet portland cement is alkaline. As such it is incompatible with acids, ammonium salts and aluminum metal. Wet portland cement can cause severe chemical burns; do not get inside clothing, boots, shoes, or gloves.

## SECTION 8 Exposure Control / Personal Protection

### Exposure limit values:

Component	Value / Source			
Portland cement 65997-15-1	TLV	1 mg/m <sup>3</sup> (respirable fraction) 8 h	No data available	ACGIH
Portland cement 65997-15-1	REL	5 mg/m <sup>3</sup> (respirable fraction) 10 h	10 mg/m <sup>3</sup> (total dust) 10 h	NIOSH
Portland cement 65997-15-1	TWA	5 mg/m <sup>3</sup> (respirable fraction) 8 h	15 mg/m <sup>3</sup> (total dust) 8 h	OSHA PEL
Crystalline Silica, quartz 14808-60-7	TWA	.05 mg/m <sup>3</sup> (respirable fraction) 10 h	No data available	NIOSH REL
Crystalline Silica, quartz 14808-60-7	TWA	.025 mg/m <sup>3</sup> (respirable fraction) 8 h	No data available	ACGIH TLV
Crystalline Silica, quartz 14808-60-7	TWA	10 mg/m <sup>3</sup> divided by %SiO <sub>2</sub> + 2 (respirable fraction)	30 mg/m <sup>3</sup> divided by %SiO <sub>2</sub> + 2 (total dust)	OSHA PEL
Calcium Oxide 1305-78-8	TWA	2 mg/m <sup>3</sup> 8 h	No data available	ACGIH TLV
Calcium Oxide 1305-78-8	TWA	2 mg/m <sup>3</sup> 10 h	No data available	NIOSH REL
Calcium Oxide 1305-78-8	TWA	5 mg/m <sup>3</sup> 8 h	No data available	OSHA PEL
Limestone 1317-65-3	TWA	5 mg/m <sup>3</sup> (respirable fraction) 10 h	10 mg/m <sup>3</sup> (total dust) 10 h	NIOSH REL
Limestone 1317-65-3	TWA	5 mg/m <sup>3</sup> (respirable fraction) 8 h	15 mg/m <sup>3</sup> (total dust) 8 h	OSHA PEL
Magnesium Oxide 1309-48-4	TWA	10 mg/m <sup>3</sup> (respirable fraction) 8 h	No data available	ACGIH TLV
Magnesium Oxide 1309-48-4	TWA	No data available	15 mg/m <sup>3</sup> (total dust) 8 h	OSHA PEL
Gypsum 13397-24-5	TWA	10 mg/m <sup>3</sup> (respirable fraction) 8 h	No data available	ACGIH TLV
Gypsum 13397-24-5	TWA	5 mg/m <sup>3</sup> (respirable fraction) 8 h	10 mg/m <sup>3</sup> (total dust) 8 h	NIOSH REL
Gypsum 13397-24-5	TWA	5 mg/m <sup>3</sup> (respirable fraction) 8 h	15 mg/m <sup>3</sup> (total dust) 8 h	OSHA PEL

### Exposure Controls

*Appropriate engineering controls:* Use mechanical ventilation (dilution and local exhaust) to control exposure within applicable limits. Avoid actions that cause dust to become airborne.

### Personal Protective Equipment

*Eye/face protection:* To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet cement. Wearing contact lenses when working with cement is not recommended.

**Skin protection:** Wear impervious clothing to eliminate skin contact. Where needed wear boots that are impervious to water to eliminate foot and ankle exposure. If clothing becomes saturated with wet concrete it should be removed and replaced with dry clothing. Wear impervious gloves to eliminate skin contact. Do not rely on barrier creams. Periodically wash areas contacted by wet cement or its dry ingredients with pH neutral soap and water. Wash again at the end of work.

**Respiratory protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use and maintenance must be accordance with regulatory requirements.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by portland cement with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with portland cement, garments should be removed and replaced with clean, dry clothing.

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains or waterways. Discharge into the environment must be avoided.

**Potential environmental effects:** Not considered to be harmful to aquatic life.

## SECTION 9 Physical and Chemical Properties

### General

Physical state: powder  
Color: varies by selection  
Odor: no distinct odor  
Odor Threshold: Not available

### Safety Data

pH in water: >11.5  
Melting point: Not available  
Boiling point: Not available  
Flash point: Not available  
Freeze Point: Not available  
Evaporation rate: Not applicable  
Vapor pressure (mm Hg.): Not applicable  
Water solubility: 0.1 – 1%  
Vapor density (air = 1): Not applicable  
Relative density: 2.65



## SECTION 10 Physical and Chemical Properties

**Reactivity:** Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

**Chemical stability:** Stable under normal storage conditions.

**Possibility of Hazardous reactions:** None under normal conditions of storage and use.

**Conditions to avoid:** No specific data.

**Incompatible materials:** Oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 Toxicological Information

### Component Information

Chemical Name	Oral LD50	Inhalation LC50
Crystalline Silica, quartz 14808-60-7	500 mg/kg (Rat)	No data available
Limestone 1317-65-3	6450 mg/kg (Rat)	No data available

### Acute Toxicity

Route of Exposure	Conclusion / Remarks
<i>Inhalation</i>	Contains > 0.1% crystalline silica which can be absorbed into the body by inhalation and may have effects on the lungs, resulting in fibrosis (silicosis).
<i>Ingestion</i>	May cause burns to mouth, throat and stomach.
<i>Skin</i>	Dries skin and mucous membranes.
<i>Eye</i>	Slightly irritating, not classified.

**Sensitization:** Does not cause sensitization.

**Mutagenicity:** No data available.

**Carcinogenicity:** This product contains greater than 0.1% crystalline silica which is listed as a Group 1 carcinogen by IARC, a known carcinogen by NTP, OSHA and as A2 suspected human carcinogen by ACGIH. Based upon all available study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

**Reproductive toxicity:** No data available.

**Specific target organ toxicity- single exposure:** None.

**Specific target organ toxicity- repeated exposure:** Crystalline silica, quartz targets respiratory tract and kidneys (Category 1).

**Aspiration Hazard:** No data available.

## SECTION 12 Ecological Information

Chemical Name	CAS No	Fish LC50	Algae/aquatic plants EC50	Crustacea EC50
Calcium Oxide	1305-78-8	Oreochromis niloticus 100 mg/L (chronic NOEC)	No data available	No data available

**Persistence and degradability:** No data available.

**Bio accumulative potential:** None

**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

## SECTION 13 Disposal Consideration

**Methods of disposal:** Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14 Transport Information

**DOT:** This product is not regulated for transport.

**ARD/RID:** This product is not regulated for transport.

**IMDG:** This product is not regulated for transport.

**IATA:** This product is not regulated for transport.



## SECTION 15 Regulatory Information

**US federal regulations:** This product is hazardous according to OSHA 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**  
Crystalline Silica, quartz (impurity) (CAS 14808-60-7) Cancer.

**CERCLA Hazardous Substance List (40 CFR 302.4):** Not listed

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard Categories:** None

**SARA 302 Extremely hazardous substance:** Not listed.

**SARA 311/312 Hazardous chemical:** Not listed.

Immediate (acute) health hazard

Delayed (chronic) health hazard

**SARA 313 (TRI reporting):**

Chromium, ion (Cr6+) CAS 8540-29-9 <0.1%

Lead (organic and inorganic) <0.1%

Nickel Compounds <0.1%

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List:** Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):** Not regulated.

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130):** Not regulated.

**Clean Water Act (CWA) 307:** Chromium, ion (Cr6+)

**Safe Drinking Water Act (SDWA):** Not regulated.

### US state regulations

**US. Massachusetts RTK - Substance List:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

**US. New Jersey Worker and Community Right-to-Know Act:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Gypsum (CAS 13397-24-5)

**US. Pennsylvania Worker and Community Right-to-Know Law:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Gypsum (CAS 13397-24-5)

**US. California Proposition 65:**

Crystalline silica quartz (CAS 14808-60-7)

**International lists:**

Canadian Domestic Substances List (DSL): Portland cement is included on the DSL.

Mexico Inventory (INSQ): All components are listed or exempted.

## SECTION 16 Other Information

**Recommended restriction:** for use by trained professionals, having read the complete SDS

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