Ball Consulting Ltd.
MATERIAL SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Fast Stone® Extrusion Blend G
Fast Stone® Extrusion Blend W

Manufacturer: Ball Consulting Ltd.
338 14th Street
Ambridge, PA 15003

Information Telephone Number: 800-225-2673

Product Use: Fast setting cement

Date of Preparation: April 24, 2009

SECTION 2. COMPOSITION INFORMATION ON INGREDIENTS

Ingredient	CAS No./EINECS No.	Percent	EC Substance Classification (67/548/EEC)
Portland Cement	65997-15-1 / 266-043-4	20-50%	Not applicable
Crystalline Silica Quartz	14808-60-7 / 238-878-4	20-35%	Xn R48/20
Limestone	1317-65-3 / 215-279-6	1-5%	Not applicable
Titanium Dioxide	13463-67-7 / 236-675-5	0-5%	Not applicable
Glass Oxides	Mixture	10-20%	Not applicable
Calcium Oxide	1305-78-8 / 215-138-9	1-5%	Not applicable
Aluminum Oxide	1344-28-1 / 215-691-6	1-5%	Not applicable
Aluminum Sulfate	10043-01-3 / 233-135-0	1-5%	Not applicable
Iron Oxide	1309-37-1 /215-168-2	1-5%	Not applicable

Portland Cement contains

Ingredient	CAS No./EINECS No.	Percent	EC Substance Classification (67/548/EEC)
Portland Cement	65997-15-1 / 266-043-4	50-90%	Not applicable
Calcium Sulfate	7778-18-9 / 231-900-3	0-10%	Not applicable
Gypsum	13397-24-5	0-10%	Not applicable
Iron Oxide	1309-37-1 /215-168-2	0-15%	Not applicable
Calcium Carbonate	1317-65-3 / 215-279-6	0-5%	Not applicable
Magnesium Oxide	1309-48-4/ 215-171-9	0-5%	Not applicable
Calcium Oxide	1305-78-8 / 215-138-9	0-5%	Not applicable
Crystalline Silica Quartz	14808-60-7 / 238-878-4	0-5%	Xn R48/20

See Section 16 for further information on EU Classification.

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview: Dust may cause eye and skin irritation or burns. Wet cement may cause eye and skin damage. Inhalation of dust may cause mucous membrane and respiratory irritation. Prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis) and increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure.

EU Preparation Classification (1999/45/EC): Harmful (Xn) R48/20

SECTION 4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get immediate medical attention.
Skin Contact: Wash skin with a cool water and pH-neutral soap. Get medical attention if irritation develops or persists.
Ingestion: If swallowed, drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.
Inhalation: Remove victim to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial ventilation. Get medical attention if irritation develops or persists.

SECTION 5. FIRE FIGHTING PROCEDURES

Extinguishing Media: Use media appropriate to the surrounding fire.
Firefighting Procedures: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus in fires involving chemicals.
Unusual Fire/Explosion Hazards: None known.
Hazardous Products of Combustion: None

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill: Wear appropriate protective clothing as described in Section 8. Collect using dustless method and place in appropriate container for use. Do not use compressed air. Report releases as required by local, state and federal authorities.

SECTION 7. HANDLING AND STORAGE

Handling: Avoid contact with the eyes and skin. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Storage: Keep dry until ready to use. Store in a cool, dry, well ventilated area away from incompatible materials. Protect from physical damage.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits:

Portland Cement	5 mg/m^3 TWA OSHA PEL 10 mg/m^3 TWA ACGIH TLV 5 mg/m^3 TWA DFG MAK 4 mg/m^3 TWA UK WEL (respirable)
Crystalline Silica Quartz	10 mg/m^3 / % Silica + 2 TWA OSHA PEL (respirable fraction) 0.025 mg/m3 TWA ACGIH TLV (respirable fraction) 0.1 mg/m^3 TWA UK WEL (respirable)
Limestone	5 mg/m^3 TWA OSHA PEL 4 mg/m^3 TWA UK WEL (respirable)
Titanium Dioxide	15 mg/m^3 TWA OSHA PEL (total dust) 10 mg/m^3 TWA ACGIH TLV

	1.5 mg/m^3 TWA DFG MAK (respirable) 4 mg/m^3 TWA UK WEL (respirable)
Glass Oxides	5 mg/m^3 TWA OSHA PEL (respirable)
Calcium Oxide	5 mg/m^3 TWA OSHA PEL 2 mg/m^3 TWA ACGIH TLV 2 mg/m^3 TWA UK WEL
Aluminum Oxide	5 mg/m^3 TWA OSHA PEL (respirable) 4 mg/m^3 TWA DFG MAK (inhalable) 4 mg/m^3 TWA UK WEL (respirable)
Aluminum Sulfate	None Established
Calcium Sulfate	5 mg/m3 TWA OSHA PEL (respirable) 10 mg/m3 TWA ACGIH TLV (inhalable) 1.5 mg/m^3 TWA DFG MAK (respirable)
Gypsum	5 mg/m3 TWA OSHA PEL (respirable) 10 mg/m3 TWA ACGIH TLV (inhalable) 1.5 mg/m^3 TWA DFG MAK (respirable) 4 mg/m^3 TWA UK WEL (respirable)
Iron Oxide	5 mg/m3 TWA ACGIH TLV (respirable) 1.5 mg/m^3 TWA DFG MAK (respirable)
Calcium Carbonate	5 mg/m3 TWA OSHA PEL (respirable) 4 mg/m^3 TWA UK WEL (respirable)
Magnesium Oxide	15 mg/m3 TWA OSHA PEL (total particulate) 10 mg/m3 TWA ACGIH TLV (inhalable) 4 mg/m^3 TWA UK WEL (respirable)

Engineering Controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

Personal Protective Equipment:

Eye Protection: Chemical safety glasses with sideshields or chemical goggles to prevent eye contact.

Skin Protection: Wear impervious gloves such as rubber to prevent skin contact.

Respiratory Protection: If the exposure limits are exceeded a NIOSH approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Other Protective Clothing or Equipment: Impervious clothing as needed to avoid skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White or gray powder with no odor.

Boiling Point: >1000°C (1832°F) (portland cement)
Freezing Point: Not available
Solubility in Water: Negligible
Vapor Pressure (mmHg): Not available
Evaporation Rate: Not applicable
% Volatile by Volume: 0
Flammable Limits in Air:
LEL: Not applicable
UEL: Not applicable

Melting Point: Not available
Specific Gravity: Not available
pH: 12-13
Vapor Density: Not applicable
Viscosity: Not applicable
Flashpoint: Not flammable
Autoignition Temperature: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility/Conditions to Avoid: Unintentional contact with water will result in hydration and produce caustic calcium hydroxide. Avoid contact with acids, ammonium salts and aluminum.
Hazardous Decomposition Products: Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride.
Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: Dust may cause irritation or redness with inflammation of the cornea. May cause mechanical irritation. Direct contact with wet cement or large amounts of dry powder may cause irritation or burns with possible blindness.
Skin: Contact with dry powder may cause drying of the skin and mild irritation. May cause mechanical irritation. Contact with wet cement may cause irritation with thickening, cracking and fissuring of the skin. Prolonged contact may cause skin burns. May cause allergic skin reaction is some individuals.
Ingestion: Large amounts may cause gastrointestinal irritation or burn with nausea and diarrhea.
Inhalation: Inhalation of dust may cause irritation to the nose, throat and upper respiratory tract with coughing and shortness of breath.
Chronic Health Effects: Chronic inhalation of respirable crystalline silica dust may cause may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.
Carcinogenicity: Crystalline silica quartz is listed as “Carcinogenic to Humans” (Group 1) by IARC and “Known to be a Human Carcinogen" by NTP. Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen).
Medical Conditions Aggravated by Exposure: Individuals with pre-existing eye, skin and respiratory disorders may be at increased risk from exposure.

Acute Toxicity Data:

Portland Cement	No data available
Crystalline Silica Quartz	Oral Rat LD50 - >22,500 mg/kg.
Limestone	No data available
Titanium Dioxide	Oral rat LD50 >7,500 mg/kg Skin Rabbit LD50 >10,000 mg/m3
Calcium Oxide	No data available
Calcium Sulfate	No data available
Aluminum Oxide	No data available
Aluminum Sulfate	No data available
Iron Oxide	No data available
Gypsum	No data available
Calcium Carbonate	No data available
Magnesium Oxide	No data available

SECTION 12. ECOLOGICAL INFORMATION

Crystalline Silica Quartz	72 hr LC50 carp: >10,000 mg/L
Titanium Dioxide	96 hr LC50 fathead minnow >1,000 mg/L

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with federal, state, and local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Shipping Description: Not Regulated

DOT Technical Name: None
DOT Hazard Class: N/A
UN Number: N/A
DOT Labels Required (49CFR172.101): N/A
Hazardous Substance (49CFR172.101): None
Reportable Quantity: N/A

IMDG Shipping Description: Not Regulated
ID Number: N/A
Hazard Class: N/A
Packing Group: None
Labels Required: N/A

IATA Shipping Description: Not Regulated
IATA Hazard Class: N/A
UN Number: N/A
IATA Hazard Labels Required: N/A

SECTION 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:
Hazard Category For Section 311/312: Acute health, Chronic health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U.S. STATE REGULATIONS

California Proposition 65: This product contains the following substances known to the State of California to cause cancer: Crystalline Silica 20-35%, Acetaldehyde <17 ppm. This product may also contain trace amounts of heavy metals know the State of California to cause cancer or reproductive toxicity (birth defects).

INTERNATIONAL REGULATIONS:

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).

Canadian WHMIS Classification: Class D Division2A (Very toxic material causing other toxic effects)

European Community Labeling: Contains Crystalline Silica Quartz 238-878-4

Harmful

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
S22 Do not breathe dust.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.

European Inventory of New and Existing Chemicals Substances (EINECS): All of the components in this product are listed on the EINECS inventory.

Australian Inventory of Chemical Substances: All of the components in this product are listed on the AICS for Australia.

China Inventory of Existing Chemicals and Chemical Substances: All of the components in this product are listed on the IECSC for China.

Korean Existing Chemicals List: All of the components in this product are listed on the KECL for Korea.

Philippine Inventory of Chemicals and Chemical Substances: All of the components in this product are listed on the PICCS.

SECTION 16. OTHER INFORMATION

HMIS Hazard Rating:
Health –2* Fire Hazard – 0 Reactivity – 0
*Chronic Health Hazard

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):
Xn Harmful
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Revision History: New MSDS