

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (as used on Label) **BRAVO™ NON CHLORIDE MORTAR ACCELERATOR**

Product Use: Non-chloride Accelerator Admixture for mortar.

Manufacturer's Name & Address:	Emergency Telephone Number:	(800) 424-9300
AXIM		(CHEMTREC)
P.O. Box 234	Telephone Number for Information:	(330) 966-0444
8282 Middlebranch Road		Ext. 2046
Middlebranch, Ohio 44652	Date Prepared: July 2008	

MSDS Prepared By: AXIM Concrete Technologies

MSDS Number: 2000013-1

SECTION 2. HAZARDS IDENTIFICATION

This product is a colorless to light brown, odorless liquid.

EMERGENCY OVERVIEW

WARNING!

Potential Oxidizer. Contact of dried product with combustible materials may cause fire. May cause eye and skin irritation. Inhalation of vapors or mists may cause respiratory irritation, coughing, sore throat, shortness of breath and tightness in the chest. Harmful if swallowed. May cause blood effects.

See Section 11 for detailed information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount by Wt.
Calcium Nitrate Tetra hydrate	13477-34-4	< 70%

SECTION 4. FIRST AID MEASURES

Eye: Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get medical attention if irritation occurs and persists.

Skin: Remove contaminated clothing. Immediately wash skin thoroughly with soap and water. If irritation develops or persists, get medical attention. Launder clothing before re-use. Do not allow product to dry on clothing – may present a fire hazard.

Ingestion: Do not induce vomiting unless instructed to do so by a trained physician. If conscious, rinse mouth with water and give one glass of water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Inhalation: If irritation occurs, remove to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Get medical attention if irritation occurs and persists.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media: This product is not combustible in liquid form. Use any media that is appropriate for the surrounding fire.

Special Fire Fighting Procedure: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Do not allow run-off from fire fighting to enter drains or water courses.

Unusual Fire and Explosion Hazards: This product is an aqueous solution that will not burn. Nitrates are oxidizing agents. May cause ignition of flammable or combustible materials.

Hazardous Combustion Products: Oxides of nitrogen and calcium compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Evacuate spill area and keep unprotected personnel away. Remove all combustible or flammable materials from spill area if it is safe to do so. Wear appropriate protective clothing as described in Section 8. Collect liquid with an inert absorbent and place into container. Do not use combustible absorbents or towels. Report releases as required by local, state and federal authorities.

SECTION 7. HANDLING AND STORAGE

Handling: Avoid contact with the eyes, skin and clothing. Avoid breathing vapors or mists. Wear protective clothing and equipment. Wash thoroughly with soap and water after handling. Keep away from all flammable or combustible materials such as solvents, oil, paper, cloth rags, etc. Immediately remove and launder contaminated clothing. Do not allow product to dry on clothing – may present a fire hazard.

Do not reuse un-approved containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers.

Storage: Store in a dry, well ventilated area away from excessive heat and incompatible materials. Avoid storage on wooden floors.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Calcium Nitrate	None Established
Water	None Established

Engineering Controls: General ventilation is normally adequate. For operations where exposure levels are excessive, local exhaust ventilation or other mechanical ventilation may be needed.

Respiratory Protection: If exposure levels are excessive or irritation is experienced, a NIOSH approved particulate (dust/mist) respirator (N95 or better filters) may be worn. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134, CSA Standard Z94.4-02 and good industrial hygiene practice.

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

Eye Protection: Chemical safety goggles are recommended. The additional use of a face shield is recommended if splashing is likely.

Other: Wear impervious clothing as needed to prevent contact. A safety shower and eyewash should be available in the immediate work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear, colorless, odorless liquid.

Physical State: Liquid	Boiling Point: >212°F (100°C)
Vapor Density: Not applicable	Vapor Pressure: Not applicable
Solubility In Water: 100%	Evaporation Rate: Same as water
Specific Gravity: 1.470 @ 15°C	pH: 5.0
Melting Point: Not applicable	Octanol/Water Coefficient: Not determined
Flash Point: None	Flammable Limits: LEL: Not applicable UEL: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility (Materials to Avoid): Avoid contact with reducing agents, and flammable/combustible materials. Avoid exposure to excessive heat.

Hazardous Decomposition Products: Oxides of nitrogen and calcium compounds.

Hazardous Polymerization: Will Not Occur

SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Ingestion: May cause gastrointestinal tract irritation. May cause methemoglobinemia, a blood disorder that inhibits the bonding of oxygen to red blood cells.

Inhalation: Inhalation of vapors or mists may cause respiratory irritation. May cause methemoglobinemia.

Eye: May cause eye irritation.

Skin: Contact may cause skin irritation.

Sensitization: None of the components is known to cause sensitization.

Chronic: Prolonged or repeated exposure may cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis, rapid heart rate, unconsciousness and possible death.

Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH or OSHA.

Mutagenicity: No data is available.

Medical Conditions Aggravated by Exposure: Employees with pre-existing blood disorders may be at increased risk from exposure.

Acute Toxicity Values:

Calcium Nitrate: Oral Rat LD50 302 mg/kg (anhydrous)

SECTION 12. ECOLOGICAL INFORMATION

In high concentrations, this product may be dangerous to aquatic life.

Calcium Nitrate: LC50 bluegill 2,400 mg/L/96 hr.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Flush with water to chemical waste disposal, then dispose according to local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

This product is not regulated for transportation by US DOT or Canadian TDG.

Surface Freight Classification: Concrete or Masonry Plasticizer and Water Reducing Compound

SECTION 15. REGULATORY INFORMATION

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

SARA Hazard Category (311/312): Acute health, chronic health, fire hazard

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Calcium Nitrate (nitrate compound) 13477-34-4 70%

EPA TSCA Inventory: Calcium nitrate tetra hydrate is listed under Calcium nitrate (CAS #10124-37-5) on the EPA TSCA Inventory.

CANADA:

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

Canadian WHMIS Classification: Class D - Division 2 - Subdivision B - (A toxic material causing other chronic effects)

Canadian CEPA: Calcium nitrate tetra hydrate is listed under Calcium nitrate (CAS #10124-37-5) on the Canadian DSL.

SECTION 16. OTHER INFORMATION

NFPA Rating: Health = 2 Fire = 0 Instability = 0 Oxidizer

HMIS Rating: Health = 2 Fire = 0 Reactivity = 0

4 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard

REVISION SUMMARY:

Date Prepared: July 2008

MSDS Prepared By: Axim Concrete Technologies
Address: 8282 Middlebranch Road Middlebranch OH 44652
MSDS Preparer Phone No.: 330-966-0444 fax 330-499-9275

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of this data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, state and local laws and regulation applicable to safety, occupational health, right to know and environmental protection.