

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (as used on Label) **CATEXOL™ 2000 RHE**

Product Use: Set accelerator for Concrete.

| | | |
|--------------------------------|-----------------------------------|----------------|
| 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: | April 2006 |

MSDS Prepared By: Industrial Health & Safety Consultants, Inc.

MSDS Number: 2000030-1 **Cancels MSDS #:** No MSDS # (Rev. March, 2006) **Date of Last Rev.:** March, 2006

SECTION 2. HAZARDS IDENTIFICATION

This product is a dark brown liquid with a sweet odor

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 or fatal if swallowed. May cause irritation of the mouth, throat and gastrointestinal tract, abdominal pain, nausea and vomiting. May cause allergic skin and respiratory reaction (sensitization). May affect the heart, blood, thyroid and central nervous system.

See Section 11 for detailed information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No. | Amount by Wt. |
|--------------------|-------------|---------------|
| Calcium Nitrate | 13477-34-4 | 40-60% |
| Sodium Thiocyanate | 540-72-7 | 10-20% |
| Amine Derivative | Proprietary | 1-5% |

SECTION 4. FIRST AID MEASURES

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

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. (Discard contaminated shoes) Do not allow product to dry on clothing – may present a fire hazard.

Ingestion: DO NOT INDUCE VOMITING. 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: Immediately remove to fresh air. If breathing is difficult, have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

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, however, dried product will burn under fire conditions. Nitrates are oxidizing agents. Dried residue may cause ignition of flammable or combustible materials.

Hazardous Combustion Products: Oxides of carbon, sulfur and nitrogen, calcium compounds, hydrogen cyanide, ammonia and formaldehyde.

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 |
| Sodium Thiocyanate | None Established |
| Amine Derivative | 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: Dark Brown aqueous solution with a sweet odor.

| | |
|--|--|
| 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: 1.410 +/- 0.041 @ 25°C | pH: 7.5 +/- 1.0 |
| 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 acids, reducing agents, finely powdered metals and flammable/combustible materials. Avoid exposure to excessive heat.

Hazardous Decomposition Products: Oxides of carbon, sulfur and nitrogen. Reaction with acids may yield toxic thiocyanic acid, ammonia and formaldehyde. Formaldehyde presents a cancer hazard. High temperature decomposition may yield hydrogen cyanide.

Hazardous Polymerization: Will Not Occur

SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Ingestion: Ingestion may cause irritation of the mouth, throat and gastrointestinal tract, dizziness, abdominal pain, nausea, vomiting, bloody diarrhea, low blood pressure, convulsions, and collapse. In some cases bacteria in the stomach may convert the nitrate to the more toxic nitrite with symptoms including nausea, dizziness, vertigo, vomiting, collapse, cyanosis, abdominal pain, methemoglobinemia, rapid heart beat, irregular breathing, coma, convulsions, circulatory collapse and death.

Inhalation: Inhalation of vapors or mists may cause respiratory irritation with symptoms of coughing, nose bleeds, sore throat, shortness of breath and tightness in the chest.

Eye: Contact may cause moderate to severe irritation with redness, tearing and pain. Corneal damage is possible.

Skin: Contact may cause irritation with redness, itching and pain.

Sensitization: Repeated contact may result in skin and /or respiratory sensitization with symptoms of asthma or skin rash.

Chronic: Prolonged or repeated exposure may cause mild gastroenteritis, dermatitis, eczema, headache, mental impairment, thyroid, kidney and liver damage and anemia.

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 skin, respiratory and kidney disease may be at increased risk from exposure.

Acute Toxicity Values:

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

Sodium Thiocyanate: Oral Rat LD50 764 mg/kg

Amine Derivative: Oral Mouse LD50 569 mg/kg

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.

Sodium Thiocyanate: LC50 daphnia magna 11.3 ppm/48 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 TGD.

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

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 | 40-60% |
| Sodium Thiocyanate | (cyanide compound) | 540-72-7 | 10-20% |

EPA TSCA Inventory: All of the ingredients in this product are listed on, or exempt from, 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 A - (A very toxic material causing other chronic effects)

Canadian CEPA: All of the ingredients in this product are listed on, or exempt from, the Canadian DSL.

SECTION 16. OTHER INFORMATION

NFPA Rating: Health = 2 Fire = 0 Instability = 0
HMIS Rating: Health = 2* Fire = 0 Reactivity = 0
4 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard
*Chronic Health Hazard

REVISION SUMMARY:

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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.