



MINING SERVICES INTERNATIONAL

MATERIAL SAFETY DATA SHEET



MSI EMGEL 250

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Mining Services International, Inc.
8805 S. Sandy Parkway
Sandy, Utah 84070-6408

EMERGENCY PHONE NUMBER: (801) 233-6000 (MSI) or (800) 424-9300 (CHEMTREC)

TRADE NAME: EMGEL 250, EMGEL 250 MS or MS+

CAS NUMBER: N/A

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Exposure Limits (mg/m³ unless noted) % by Wgt</u>		
		<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>Typical</u>
Ammonium Nitrate	6484-52-2	N/A	N/A	50 - 53
Aluminum	7429-90-5	10	N/A	2 - 5

SECTION 3 - HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EFFECTS OF OVEREXPOSURE: Respiratory irritation, dizziness, nausea, vomiting, tachycardia. Prolonged, repeated skin contact may result in skin irritation or more serious skin disorders. Toxic effects are unlikely to occur if good personal hygiene is practiced.

EMERGENCY RESPONSE DATA: Light gray in color, in a white polyethylene casing or a woven polypropylene shot bag.

DOT NAERG No. - 112



MATERIAL SAFETY DATA SHEET



SECTION 4 - FIRST AID MEASURES

EFFECTS OF OVEREXPOSURE: UNKNOWN

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation - Remove to a well-ventilated area. If breathing difficulties persist seek medical help.

Ingestion - Do not induce vomiting. Drink large amounts of water or milk. Give liquid activated charcoal and seek medical attention.

Skin - Wash effected area with soap and rinse with large amounts of water. Launder contaminated clothing before reuse.

Eyes - Flush with copious amounts of clean or buffered water for at least 15 minutes. Seek medical attention immediately.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: Not Established **LEL:** Not Available

EXTINGUISHING MEDIA: Water - Deluge with water to cause a mass cooling.

UNUSUAL FIRE & EXPLOSION HAZARDS: System contains its own oxygen and fuel. May explode when subject to extreme heat or shock. Will release NO_x

SPECIAL FIRE FIGHTING PROCEDURES: DO NOT FIGHT AN ESTABLISHED FIRE.
Clear area and allow to burn out.



MATERIAL SAFETY DATA SHEET



SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Gather up spilled cartridges and wash any contaminated area with water.

WASTE DISPOSAL METHOD:

Place down a blast hole prior to detonation; to be utilized as part of the blast. May be burned in a shallow layer on barren ground in accordance with federal, state and local regulations.

SECTION 7 - HANDLING AND STORAGE

DURING HANDLING AND STORAGE:

Comply with regulations and precautions for "Blasting Agent, n.o.s." classification by regulatory agencies. Wear chemical resistant gloves and boots.

OTHER PRECAUTIONS:

May cause shrinkage of leather shoes and gloves, avoid contact; slightly corrosive to ferrous metals.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY: Dust/Mist Mask is advisable

VENTILATION: Ambient

GLOVES: Chemical resistant

EYE: Safety Glasses or Goggles

OTHER PROTECTIVE EQUIPMENT: None required.

THRESHOLD LIMIT VALUE: Nitrogen dioxide = 3 ppm
Nitrous oxides = 25 ppm



MATERIAL SAFETY DATA SHEET



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: N/A

MELTING POINT: N/A

VAPOR DENSITY: N/A

EVAPORATION RATE: N/A

PERCENT VOLATILE BY VOLUME: N/A

SOLUBILITY IN WATER: NO

Density: 1.15 - 1.25 gm/cc

APPEARANCE AND ODOR:

Gel; odor of fuel or mineral oil; grey in color, with solid ammonium nitrate prill throughout the mix. Packaged in 1.5 to 3 inch polyethylene cartridges and/or 3.5 to 9 inch diameter woven polypropylene shot bags, with polyethylene liner.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: High heat in a confined area.

HAZARDOUS DECOMPOSITION PRODUCTS: NO₂, NO_x, CO₂, Ammonia

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 - TOXICOLOGICAL DATA

ACUTE TOXICITY: Not Established

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not Established



MATERIAL SAFETY DATA SHEET



SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: The contaminated material is to be placed down a borehole to be utilized as part of the blast. If local regulations allow, it may be burned in a shallow layer on barren ground.

RCRA INFORMATION: Any other form of disposal of this product may be subject to RCRA regulations (40 CFR 261) due to the characteristic(s)/chemical(s) listed in section 2.

SECTION 14 - TRANSPORT INFORMATION

Regulatory classifications are as follows:

DOT: Blasting Agent **OSHA:** Blasting Agent **MSHA:** Blasting Agent

USA DOT:

SHIPPING NAME: Explosive, blasting, type E, UN0332

HAZARD CLASS AND DIVISION: 1.5D

ID NUMBER: UN0332

REFERENCE No.: EX-9008114

PACKING GROUP: II

DANGEROUS WHEN WET: NO

POISON: NO

LABEL(s): Blasting Agent

PLACARD(s): Blasting Agent 1.5D

PRODUCT RQ: N/A

NAERG NUMBER: 112

SECTION 15 - REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, and EINECS/ELINCS.

US Superfund Amendments and Reauthorization Act (SARA) Title III: This product is considered an "Extremely Hazardous Substance". This product also contains Ammonium Nitrate, which is reportable to SARA (313) toxic release program.

SECTION 16 - OTHER INFORMATION

This product meets UN standards for Blasting Agent as outlined in TDG Manual of Tests and Criteria. Second Revised Edition.