



MATERIAL SAFETY DATA SHEET

HYDROMITE EMULSIONS

DATE JUNE 2004

MSDS NO. E-4

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SECTION I

Issued by the Safety and Compliance Dept.

AUSTIN POWDER COMPANY
25800 SCIENCE PARK DRIVE
CLEVELAND, OHIO 44122
EMERGENCY PHONE
DAY 216-464-2400
NIGHT 216-464-2407

TRADE NAME AND SYNONYMS

Hydromite 600 Series
Hydromite 800 Series
Hydromite 1000 Series
Hydromite 2000 Series
Hydromite 3000 Series
Hydromite 4000 Series

SECTION II HAZARDOUS INGREDIENTS

Ammonium Nitrate: NH_4NO_3 ,	CAS No. 6484-52-2	(65 - 90%)
Fuel Oil/ Mineral Oil Blend,	CAS No. 68476-30-2	(3 - 9%)
Aluminum: Al,	CAS No. 7429-90-5,	(0 - 10%)
Polymeric Surfactant	Not Applicable for Mixtures	(0.5 - 2%)

An emulsified mixture of ammonium nitrate solution, fuel oil, mineral oil and polymeric surfactant (emulsifier). May also contain ammonium nitrate prills (granules) and/or aluminum.

SECTION III PHYSICAL DATA

BOILING POINT:	N/A	VAPOR PRESSURE (mm Hg)	N/A
SPECIFIC GRAVITY ($\text{H}_2\text{O} = 1$):	1.20 to 1.30	VAPOR DENSITY (Air=1)	N/A
PERCENT VOLATILE BY VOL. (%):	N/A	EVAPORATION RATE:	N/A

SOLUBILITY IN WATER: Although in excess of 80% of the materials are readily soluble in water, the products have excellent water resistance.

APPEARANCE AND ODOR: White to tan colored thick cream. If aluminum is present, gray metal particles will be visible. If ammonium nitrate prill is present, white to tan colored granules will be visible. Slight odor of fuel oil.

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT:	165 ⁰ F (74 ⁰ C) (PMCC)
FLAMMABLE LIMITS:	Not available
EXTINGUISHING MEDIA:	See below.
SPECIAL FIRE FIGHTING PROCEDURES:	Do not fight fires. Withdraw personnel immediately. Allow fire to burn itself out.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	May explode when subjected to fire or shock, especially when confined and in large quantities.

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: ACGIH: Oil mist, mineral, 5 MG/M³, Aluminum metal dust, 10 MG/M³
OSHA: Oil mist, mineral, 5 MG/M³, Aluminum metal dust, 15 MG/M³

EFFECTS OF OVEREXPOSURE: Acute: Ingestion of large amounts may cause cyanosis, nausea, collapse, vomiting, abdominal pain, rapid heartbeat and breathing, coma, convulsions, and death may occur.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Slight irritant. Flush with large amounts of water for at least 15 minutes and consult a physician.

Skin: Slight irritant. Wash with mild soap and water.



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SECTION VI REACTIVITY DATA

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STABILITY: Stable under normal conditions. May explode when subjected to fire or shock, especially when confined and in large quantities. Avoid temperatures above 212°F, (100°C).

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid all contamination, especially peroxides and chlorates.

Alkaline contamination may liberate ammonia fumes.

HAZARDOUS DECOMPOSITION PRODUCTS: Gaseous nitrogen oxides and carbon oxides: Toxic decomposition products including carbon monoxide (CO) may migrate to off blast-site areas.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Pick up and dispose of all spilled material immediately. Do not permit smoking or open flames near spill site.

WASTE DISPOSAL METHOD: Uncontaminated material may be placed in large diameter boreholes and detonated so that the explosive energy is utilized as originally intended. Dispose of under direct supervision of a qualified person according to local, state and federal regulations. Call Austin Powder for recommendations and assistance.

TRANSPORTATION EMERGENCIES involving spills, leaks, fires or exposures in the United States:

CALL CHEMTREC for emergencies only: 1-800-424-9300. For calls originating outside the U. S. dial the U. S. access number followed by: 1-703-527-3887. All calls are recorded.

SECTION VIII SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION: Not required under normal conditions.

VENTILATION: Not required under normal conditions.

PROTECTIVE GLOVES: Slight skin irritant.

EYE PROTECTION: Slight eye irritant.

SECTION IX SPECIAL PRECAUTIONS

COMPLY WITH THE SAFETY LIBRARY PUBLICATION NO. 4 "WARNINGS AND INSTRUCTIONS" AS ADOPTED BY THE INSTITUTE OF MAKERS OF EXPLOSIVES.

TRANSPORTATION, STORAGE AND USE MUST COMPLY WITH OSHA SAFETY AND HEALTH STANDARDS 29CFR1910.109, APPLICABLE MSHA REGULATIONS, THE DOT AND HAZARDOUS MATERIALS REGULATIONS, BATF REQUIREMENTS AND STATE AND LOCAL TRANSPORTATION, STORAGE AND USE REGULATIONS AND ORDINANCES.

DOT or IMDG proper shipping description: Explosive, Blasting, Type E, 1.5D, UN0332, PG II

This material may become a hazardous waste under certain conditions and must be collected, labeled and disposed of per state and federal hazardous waste regulations.

None of the components are listed in the 1987 IARC Monographs, Group 1, 2A or 2B as known, probable, or possible carcinogens, nor are they listed in the NTP annual report on carcinogens.