MATERIAL SAFETY DATA SHEET



ADVAGuard® 750A

FMC

MSDS Ref. No: QS-MSD-191 Version: US/Canada Date Approved: 05/18/2000 Revision No: New MSDS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ADVAGuard® 750A CHEMICAL FAMILY: Molybdate solution MOLECULAR FORMULA: Withheld GENERAL USE: Chemical Manufacturing

MANUFACTURER

FMC CORPORATION Lithium Division P.O. Box 795 Bessemer City, NC 28016-0795 General Information: (704) 868-5300

Emergency Telephone Numbers:

CHEMTREC (800) 424-9300 Emergency Phone (704) 629-5361 (Plant) Call Collect 24 Hr/Day Emergency Phone (303) 595-9048 (Medical) Call Collect

. COMPOSITION / INFORMATION ON INGREDIENTS

 Chemical Name
 CAS #
 Wt.%

 Trade Secret
 1 - 30

 Water
 7732-18-5 70 - 99

COMMENTS:

FMC is withholding the specific chemical identity under provision of the OSHA Hazard Communication Rule Trade Secrets provisions (29 CFR 1910.1200(I)). The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200 (1) (2) (3) (4). This Material Safety Data Sheet provides information for employee training and hazard identification.

Trade Secret #: FMCNJ40.

. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Corrosive

POTENTIAL HEALTH EFFECTS: This product is a strong acid and it is corrosive to eyes (may cause blindness), skin, and mucous membranes of the respiratory and gastrointestinal tracts.

(See Section 11, Toxicological Information)

. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist immediately.

SKIN: Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. Obtain immediate medical attention. Contact a medical doctor if necessary.

INGESTION: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, see a medical doctor. If breathing has stopped, give artificial respiration and see a medical doctor immediately.

NOTES TO MEDICAL DOCTOR: This product is corrosive to the skin, eyes, and mucous membranes of the respiratory and gastrointestinal tracts. Consideration should be given to gastric lavage, with endotracheal tube in place. Treatment is controlled removal of exposure with symptomatic and supportive care.

. FIRE FIGHTING MEASURES

FLAMMABLE LIMITS: Not applicable

GENERAL HAZARD: None

EXTINGUISHING MEDIA: Dry chemical, CO2, water spray or regular foam.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of phosphorous and molybdenum.

FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus (SCBA) approved for fire fighting. This is necessary to protect against the hazards of heat, products of combustion and oxygen deficiency. Do not breathe smoke, gases or vapors generated.

AUTOIGNITION TEMPERATURE: Not applicable

PROPERTIES CONTRIBUTING TO FLAMMABILITY: None

FLASH POINT: Not applicable

SENSITIVITY TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

COMMENTS:

(See Section 10, Stability and Reactivity)

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Contain spill with absorbant. Transfer to suitable container and clean spillage with an absorbant. Dispose of waste according to local and Federal laws and regulations.

Before cleanup measures begin, review the entire MSDS with particular attention to Section 3, Emergency Overview and Potential Health Effects; and section 8, Recommended Personal Protective Equipment.

7. HANDLING AND STORAGE

HANDLING: Do not get in eyes, on skin or clothing. Wash thoroughly after handling.

STORAGE: Keep container closed. Keep away from bases.

3. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust ventilation to keep airborne concentrations below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses or goggles

RESPIRATORY: When engineering controls are not adequate, wear a NIOSH/MSHA respirator approved for protection against inorganic dusts and mists.

PROTECTIVE CLOTHING: Rubber gloves

WORK HYGIENIC PRACTICES: Quick-drench eyewash and safety shower.

COMMENTS: EXPOSURE LIMITS: Particulates Not Otherwise Classified (PNOC): ACGIH/TWA 10 mg/m³ (inhalable particulate); 3 mg/m³ (respirable particulate). Soluble compounds, as Mo: ACGIH/TWA 5 mg/m³; OSHA/PEL 5 mg/m³

. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: None

APPEARANCE: Clear yellow solution

pH: (1% solution): 1-2

PERCENT VOLATILE: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

BOILING POINT: Not available

MELTING POINT: Not applicable

SOLUBILITY IN WATER: Miscible in any proportion

EVAPORATION RATE: Equivalent to water

SPECIFIC GRAVITY: 1.0 to 1.2 g/cc

MOLECULAR WEIGHT: Not available

COEFF. OIL/WATER: Not available

ODOR THRESHOLD: Not available

0. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Mixing with strong bases or oxidizers.

STABILITY: Stable

POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: None known

INCOMPATIBLE MATERIALS: Strong bases or strong oxidizers.

1. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Corrosive

SKIN EFFECTS: Corrosive

DERMAL LD₅₀: Corrosive

ORAL LD_{so}: No data available for the product. Corrosive.

INHALATION LC₅₀: No data available for the product. Corrosive.

ACUTE EFFECTS FROM OVEREXPOSURE: This product is corrosive to the skin, eyes, and mucous membranes of the respiratory and gastrointestinal tracts.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product. Overexposure to molybdenum can cause copper deficiency and possibly gout-like symptoms and respiratory effects.

CARCINOGENICITY:

IARC: Not listed

NTP: Not listed

OSHA: Not listed

OTHER: ACGIH: Not listed

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available for the product.

CHEMICAL FATE INFORMATION: Environmental toxicity testing of the product has not been carried out. This product is an acid; therefore, release of this product in aquatic systems may affect the pH.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Consult the owner of the waste for proper waste disposal procedure. Dispose of waste according to local and Federal laws and regulations.

14. TRANSPORT INFORMATION

COMMENTS:

U.S. DOT, INTERNATIONAL MARITIME, AND INTERNATIONAL AIR

Proper Shipping Name: Corrosive liquids, acidic, inorganic, N.O.S.

(molybdate solution)

Classification: 8, Corrosive

Labels: Corrosive UN Number: UN 3264 Packing Group: II

5. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): Not listed

SECTION 311 HAZARD CATEGORY (40 CFR 370):

Immediate (acute) health hazard.

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): This product does not contain a toxic chemical subject to the reporting requirements of Section 313 of Emergency Planning and Community Right-To-Know Act of 1986.

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA REGULATORY (40 CFR 302.4): Not applicable

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY (40 CFR 707.60): This product is not subject to TSCA 12 (b) Export Notification Requirements.

TSCA STATUS (40 CFR 710): Listed

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

Product Identification No.: 3264

Hazard Classification: Class E (Corrosive)

Ingredient Disclosure List: Molybdenum compounds are listed

6. OTHER INFORMATION

NFPA RATING

HEALTH:	3.
FLAMMABILITY	0
REACTIVITY:	0
SPECIAL:	None

uis MSDS has been prepared to meet U. S. OSHA Hazard communication Standard, 29 CFR 1910.1200 and mada's Workplace Hazardous Materials Information System (WHMIS) requirements.

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