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

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Wt.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>1 - 30</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>70 - 99</td>
</tr>
</tbody>
</table>

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.

3. 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.
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)
5. 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.

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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.

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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

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. 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 LD₅₀: 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

<table>
<thead>
<tr>
<th>NFPA RATING</th>
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<tbody>
<tr>
<td>HEALTH:</td>
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<tr>
<td>FLAMMABILITY:</td>
</tr>
<tr>
<td>REACTIVITY:</td>
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<tr>
<td>SPECIAL:</td>
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</tbody>
</table>

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

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