ADVAGuard® 750B



MSDS Ref. No: QS-MSD-192 Version: US/Canada Date Approved: 05/18/2000 Revision No: New MSDS

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ADVAGuard® 750B CHEMICAL FAMILY: Metal salts

MOLECULAR FORMULA: Not available 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

Antimony Bromide
Lithium bromide

Water

<u>CAS # Wt.%</u> 7789-61-9 95 - 99 7550-35-8 0 - 4

7732-18-5 <1

. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Corrosive. Odorless, white-grayish crystalline powder.

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

COMMENTS:

(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: DO NOT USE WATER. Dry chemical, CO2, or regular foam.

HAZARDOUS COMBUSTION PRODUCTS: Emits toxic fumes under fire conditions.

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. Water hydrolyzes material generating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

AUTOIGNITION TEMPERATURE: Not applicable

PROPERTIES CONTRIBUTING TO FLAMMABILITY: None

FLASH POINT: Not applicable

SENSITIVITY TO STATIC DISCHARGE: Not applicable

SENSITIVITY TO IMPACT: Not applicable

COMMENTS:

(See Section 10, Stability and Reactivity)

CCIDENTAL RELEASE MEASURES

RELEASE NOTES: Sweep up and place in suitable transport container. Dispose of waste according to all 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.

HANDLING AND STORAGE

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

STORAGE: Keep container closed. Store in a cool, dry place. Store away from acids and water.

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.

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). ACGIH/TWA 0.5 mg/m³ as Sb; OSHA/PEL 0.5 mg/m³ as Sb

. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: None

APPEARANCE: White-grayish crystalline powder

pH: Not available

PERCENT VOLATILE: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

BOILING POINT: Not available

MELTING POINT: Not available

SOLUBILITY IN WATER: Reacts with water

EVAPORATION RATE: Not applicable

SPECIFIC GRAVITY: 4.0 to 4.2 g/cc

MOLECULAR WEIGHT: Not available

COEFF. OIL/WATER: Not available

ODOR THRESHOLD: Not available

). STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Store away from acids and water.

STABILITY: Stable under normal storage and temperature conditions.

POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: None

INCOMPATIBLE MATERIALS: Reacts violently with water, potassium or zinc.

. J'OXICOLOGICAL INFORMATION

EYE EFFECTS: Corrosive

SKIN EFFECTS: Corrosive

DERMAL LD_{so}: Corrosive

ORAL LD₅₀: No data available for the product.

> 2000 mg/kg (rat) [FMC Study 196-2081] (lithium bromide)

500 mg/kg (mice) [Pharm. and Tox. 21:419 (1958)] (lithium hydroxide) 120 mg/kg (rat) [AIHA WEEL Guide (1999)] (lithium hydroxide)

INHALATION LC_{sa}: No data available for the product.

> 15.57 mg/L (rat) [FMC Study I96-2087] (lithium bromide)

> 6.15 mg/L (rat) [FMC Study 199-2286] (lithium hydroxide)

SENSITIZATION: Sensitizing (guinea pig) [FMC Study I96-2083] (Ingredient)

ACUTE EFFECTS FROM OVEREXPOSURE: This product is corrosive to the skin, eyes and mucous membranes of the respiratory and gastrointestinal tracts. Inhalation exposure may cause headache, dizziness, and weakness followed by pulmonary edema, difficulty breathing, cyanosis and bloody sputum.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product. Chronic overexposure may cause depression, emaciation, electrocardiogram abnormalities, bronchitis, obstructive lung disease, emphysema, anemia, bloody urine, and in severe cases, psychoses and mental

CARCINOGENICITY:

IARC: Not listed -

NTP: Not listed

OSHA: Not listed

OTHER: ACGIH: Not listed

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Environmental toxicity testing of the product has not been carried out.

Lithium bromide:

Daphnia magna: 48 hr. EC50 = 364 mg/L [FMC Study I97-2170] Menidia beryllina: 96 hr. LC50 > 976 mg/L [FMC Study I97-2171] Rainbow trout: 96 hr. LC50 = 438 mg/L [FMC Study I97-2172] Mysid shrimp: 96 hr. LC50 > 995 mg/L [FMC Study I97-2173]

CHEMICAL FATE INFORMATION: Environmental toxicity testing of the product has not been carried out. Antimony bromide reacts with water forming hydrogen bromide, which may affect the pH of the water. Lithium bromide exists as the inorganic ions of lithium and bromide in aqueous solutions. Lithium bromide is not biodegraded, bioaccumulated or photodegraded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of waste according to local and Federal laws and regulations.

4. TRANSPORT INFORMATION

COMMENTS:

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

Proper Shipping Name: Corrosive solid, N.O.S.

(antimony and lithium salts) Classification: 8, Corrosive

Labels: Corrosive UN Number: UN 1759 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

SECTION 311 HAZARD CATEGORY (40 CFR 370):

Immediate (acute) health hazard, delayed (chronic) health hazard.

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): This product contains an antimony compound which is a substance subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372.

This information must be included in all MSDS's that are copied and distributed for this material.

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA REGULATORY (40 CFR 302.4): Antimony Bromide is listed. The reportable quantity is 1000 pounds.

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.: 1759

Hazard Classification: Class E (Corrosive)

Ingredient Disclosure List: Antimony compounds are listed

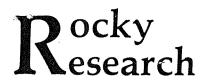
OTHER INFORMATION

NFPA RATING

HEALTH:	3
FLAMMABILITY	0
REACTIVITY:	1
SPECIAL:	None

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

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1598 Foothill Drive • Boulder City, NV 89005 • (702) 293-0851 • FAX (702) 293-0854 Mailing Address: P.O. Box 61800 • Boulder City, NV 89006-1800

Attn: Regulatory Affairs Manager

Dear Customer:

The purpose of this letter is to inform you that a product that we sell to you, ADVAGuard 750B, contains Antimony Tribromide, Chemical Abstracts Service (CAS) Number 7789-61-9. We are required to notify you of the presence of Antimony Tribromide in the product under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986. This law requires certain manufacturers to report on annual emissions of specified toxic chemicals and chemical categories.

If you are unsure if you must report or require more information, call the EPA Emergency Planning and Community Right-To-Know Hot Line: (800) 535-0202 or (202) 479-2449 (in Washington, DC or Alaska). Your other suppliers should also be notifying you if Section 313 chemicals are in the mixtures and trade name products they sell to you.

Please also note that if you repackage or otherwise redistribute this product to industrial customers, a notice similar to this one should be sent to those customers.

Sincerely,

Mara Dooley Manager Analytical Services Rocky Research