

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

Date last revised: January 23, 2008 Date printed: January 23, 2008

SECTION 1. ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 1700-U-45

NAME: 4-BROMO-5-FLUORO-2-IODOTOLUENE

SECTION 2. ---- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: 870704-15-7 $MF: C_7H_5BrFI = 314.92$

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS TOXIC (USA) HARMFUL (EU). HARMFUL IF SWALLOWED. **HMIS RATING**

HEALTH: 2

FLAMMABILITY: 0 **REACTIVITY: 1**

SECTION 4. ----- FIRST-AID MEASURES-----

ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. **DERMAL EXPOSURE**

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.

EYE EXPOSURE

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

FLASH POINT

> 230 °F / > 110 °C METHOD: CLOSED CUP

EXTINGUISHING MEDIA

SUITABLE: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM.

FIREFIGHTING

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL EVACUATE AREA.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. ----- HANDLING AND STORAGE-----

HANDLING

USER EXPOSURE: DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. STORAGE

SUITABLE: KEEP TIGHTLY CLOSED. STORE IN A COOL DRY PLACE. STORE UNDER INERT GAS.

SPECIAL REQUIREMENTS

LIGHT SENSITIVE.

SECTION 8. ---- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

ENGINEERING CONTROLS

MECHANICAL EXHAUST REQUIRED. SAFETY SHOWER AND EYE BATH. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE PARTICLE RESPIRATOR TYPE N99 (US) OR TYPE P2 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR.

HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE AND ODOR COLORLESS LIQUID PHYSICAL PROPERTIES

BOILING POINT: 249 - 250 °C @ 760 mmHg
DENSITY: 2.145 g/cm³ @ 25 °C
REFRACTIVE INDEX: 1.624 @ 20 °C

SECTION 10. -----STABILITY AND REACTIVITY -----

STABILITY

STABLE: STABLE.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,

HYDROGEN BROMIDE GAS, HYDROGEN FLUORIDE.

HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ROUTE OF EXPOSURE

SKIN CONTACT: MAY CAUSE SKIN IRRITATION.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

EYE CONTACT: MAY CAUSE EYE IRRITATION.

INHALATION: MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND

UPPER RESPIRATORY TRACT. MAY BE HARMFUL IF INHALED.

INGESTION: HARMFUL IF SWALLOWED.

SIGNS AND SYMPTOMS OF EXPOSURE

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND

TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

DOT

UNRESTRICTED

SECTION 15. ----- REGULATORY INFORMATION -----

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: Xn

INDICATION OF DANGER: HARMFUL.

R: 22

RISK STATEMENTS: HARMFUL IF SWALLOWED.

S: 26-36

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: TOXIC (USA) HARMFUL (EU).

RISK STATEMENTS: HARMFUL IF SWALLOWED.

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR

SUITABLE PROTECTIVE CLOTHING.

UNITED STATES REGULATORY INFORMATION

TSCA INVENTORY ITEM: NO

SECTION 16. ----- OTHER INFORMATION-----

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