

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

Date last revised: September 28, 2012

Date printed: October 1, 2012

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

CATALOG #: 2615-3-18

NAME: 4-FLUORO-3-PHENOXYBENZALDEHYDE SYNONYM: 2-FLUORO-5-FORMYLDIPHENYL ETHER

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

CAS NUMBER: 68359-57-9

MOLECULAR FORMULA: C<sub>13</sub>H<sub>9</sub>FO<sub>2</sub> MOLECULAR WEIGHT: 216.21

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

#### LABEL PRECAUTIONARY STATEMENTS

DANGEROUS FOR THE ENVIRONMENT.

TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

HARMFUL.

HARMFUL IF SWALLOWED.

IRRITANT.

IRRITANT TO THE EYES.

### 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 -----

#### **EXTINGUISHING MEDIA**

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

#### **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.

ENVIRONMENTAL PRECAUTIONS

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

METHODS FOR CLEANING UP

ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

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

## **HANDLING**

USER EXPOSURE: AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT BREATHE VAPOR OR MIST. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION.

#### STORAGE

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALEDAND KEPT UPRIGHT TO PREVENT LEAKAGE.

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

#### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

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 RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) 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

LIQUID

PHYSICAL PROPERTIES

BOILING POINT: 310 °C FLASH POINT: >110 °C

DENSITY: 1.2091 g/ml @ 25 °C

REFRACTIVE INDEX: 1.583

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

#### **STABILITY**

STABLE: STABLE UNDER RECOMMENDED CONDITIONS.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON OXIDES, 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: CAUSES 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 -----

TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

#### 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

UN3082 - HC 9 - PG III

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

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: Xn, Xi, N

INDICATION OF DANGER: HARMFUL, IRRITANT, DANGEROUS FOR THE ENVIRONMENT.

RISK STATEMENTS: 22-36-51/53 SAFETY STATEMENTS: 13-20-24/25-61 US CLASSIFICATION AND LABEL TEXT

TSCA: LISTED ON TSCA INVENTORY; FOR R&D USE ONLY

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

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.