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## **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 3737-3-04  
NAME: 4-FLUOROPHENYLACETONITRILE  
SYNONYMS: 4-FLUOROBENZENEACETONITRILE \* P-FLUOROBENZYL  
CYANIDE \* 4-FLUOROBENZYL CYANIDE \* P-FLUOROPHENYL-  
ACETONITRILE \* 4-FLUOROPHENYLACETONITRILE

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

CAS #: 459-22-3  
MF: C<sub>8</sub>H<sub>6</sub>FN = 135.14

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

#### LABEL PRECAUTIONARY STATEMENTS

HARMFUL.

HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

### **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 CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER.

#### EYE EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS  
OF WATER FOR AT LEAST 15 MINUTES.

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

**FLASH POINT**

227 °F / 108 °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.

**EXPOSURE HAZARD(S)**

MATERIAL: IRRITANT. HARMFUL LIQUID AND FUMES.

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

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

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

**METHODS FOR CLEANING UP**

COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER, AND HOLD FOR WASTE DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

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

**HANDLING**

USER EXPOSURE: AVOID CONTACT AND INHALATION. DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

**STORAGE**

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

**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: RUBBER GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

**GENERAL HYGIENE MEASURES**

WASH THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

APPEARANCE AND ODOR

CLEAR TO YELLOWISH LIQUID

PHYSICAL PROPERTIES

BOILING POINT: 119 - 120 °C @ 20 mmHg

DENSITY: 1.126 g/cm<sup>3</sup>

FLASH POINT: 227 °F / 108 °C METHOD: CLOSED CUP

REFRACTIVE INDEX: 1.5002

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

STABILITY

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS, STRONG BASES.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,  
NITROGEN OXIDES, HYDROGEN FLUORIDE.

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

ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES SKIN IRRITATION.

MULTIPLE ROUTES: VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS  
MEMBRANES, AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL BY  
INHALATION, INGESTION, OR SKIN ABSORPTION.

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

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: X<sub>n</sub>

INDICATION OF DANGER: HARMFUL.

R: 10-20/21/22-36/37/38

RISK STATEMENTS: FLAMMABLE. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S: 16-26-36

SAFETY STATEMENTS: KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. 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: COMBUSTIBLE (USA) FLAMMABLE (EU). HARMFUL.

RISK STATEMENTS: HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

SAFETY STATEMENTS: KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

**UNITED STATES REGULATORY**

TSCA LISTED: YES

**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.