

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 4649-3-X2

NAME: 4-FLUORO-3-NITROPHENYL ISOCYANATE

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

CAS NUMBER: 65303-83-4

MOLECULAR FORMULA: C<sub>7</sub>H<sub>3</sub>FN<sub>2</sub>O<sub>3</sub>

**MOLECULAR WEIGHT: 182.11** 

SECTION 3, ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

HARMFUL.

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

IRRITANT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

COMBUSTIBLE. LACHRYMATOR.

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 BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.

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

113 °C

**EXTINGUISHING MEDIA** 

SUITABLE: 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. COMBUSTIBLE.

# 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

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: DO NOT BREATHE VAPOR. DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

**STORAGE** 

SUITABLE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT AND OPEN FLAME.

STORE AT 2-8°C

SPECIAL REQUIREMENTS

MOISTURE SENSITIVE. HANDLE AND STORE UNDER INERT GAS.

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

#### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. USE ONLY IN A CHEMICAL FUME HOOD. 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. REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.

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

APPEARANCE

LIQUID

PHYSICAL PROPERTIES

DENSITY: 1.455 g/mL @ 20 °C

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

**STABILITY** 

CONDITIONS TO AVOID: HEAT.

MATERIALS TO AVOID: ACIDS, STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,

AND NITROGEN OXIDES, HYDROGEN CYANIDE, HYDROGEN FLUORIDE.

HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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

#### ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES SKIN IRRITATION.

SKIN ABSORPTION: HARMFUL IF ABSORBED THROUGH SKIN.

EYE CONTACT: CAUSES EYE IRRITATION. LACHRYMATOR.

INHALATION: HARMFUL IF INHALED. MATERIAL IS IRRITATING TO MUCOUS

MEMBRANES AND UPPER RESPIRATORY TRACT.

INGESTION: HARMFUL IF SWALLOWED.

**SENSITIZATION** 

RESPIRATORY: MAY CAUSE ALLERGIC RESPIRATORY REACTION.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

REPEATED EXPOSURE MAY CAUSE ASTHMA. SYMPTOMS OF EXPOSURE MAY

INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS,

SHORTNESS OF BREATH, HEADACHE, NAUSEA, AND VOMITING.

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

DATA NOT YET AVAILABLE.

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR
EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL,
STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

# SECTION 14. ------ TRANSPORT INFORMATION ---- DOT UN2206 - HC 6.1 - PG III SECTION 15. ----- REGULATORY INFORMATION -----

EU ADDITIONAL CLASSIFICATION
SYMBOL OF DANGER: Xn
INDICATION OF DANGER: HARMFUL.
RISK STATEMENTS: R20/21/22,R36/37/38
SAFETY STATEMENTS: S3/7,S6,S23,S24/25,S26,S36/37/39,S45
US CLASSIFICATION AND LABEL TEXT
TSCA: NOT 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.