

SynQuest Laboratories, Inc.

PO Box 309, Alachua, FL 32616-0309 Tel. 386/462-0788; FAX 386/462-7097

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 4654-7-45 NAME: 1,2-DICHLORO-4-FLUORO-5-NITROBENZENE

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

CAS #: 2339-78-8 MF: C<sub>6</sub>H<sub>2</sub>Cl<sub>2</sub>FNO<sub>2</sub> = 209.99

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 235 °F / 113 °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 RESPIRATOR, CHEMICAL SAFETY GOGGLES, 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: DO NOT BREATHE VAPOR. AVOID CONTACT WITH EYES, SKIN, AND 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: COMPATIBLE CHEMICAL-RESISTANT 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 YELLOW LOW MELTING SOLID PHYSICAL PROPERTIES BOILING POINT: 247 °C MELTING POINT: 17 °C FLASHPOINT: 235 °F / 113 °C METHOD: CLOSED CUP SPECIFIC GRAVITY: 1.596 g/cm<sup>3</sup> REFRACTIVE INDEX: 1.575

#### 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 CHLORIDE GAS, 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 -----

U ADDITIONAL CLASSIFICATION SYMBOL OF DANGER: Xn INDICATION OF DANGER: HARMFUL. R: 20/21/22-36/37/38 RISK STATEMENTS: HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. S: 26-37/39 SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. S CLASSIFICATION AND LABEL TEXT INDICATION OF DANGER: HARMFUL. RISK STATEMENTS: HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. UNITED STATES REGULATORY INFORMATION TSCA LISTED: NO

# 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.