

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

Date last revised: November 24, 2014 Date printed: November 24, 2014

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

CATALOG #: 3730-5-X1

NAME: 4-(TERT-BUTYL)-2-CHLOROANILINE

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

CAS NUMBER: 42265-67-8 MDL NUMBER: MFCD00052272 MOLECULAR FORMULA: C<sub>10</sub>H<sub>14</sub>CIN MOLECULAR WEIGHT: 183.68

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

#### LABEL PRECAUTIONARY STATEMENTS

HARMFUL.

HARMFUL IF SWALLOWED, INHALED, OR IN CONTACT WITH SKIN.

IRRITANT.

IRRITATING TO THE EYES, RESPIRATORY SYSTEM, AND SKIN.

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

#### ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH COPIOUS AMOUNTS OF WATER PROVIDED PERSON IS CONSCIOUS. IMMEDIATELY CONSULT A PHYSICIAN. INHALATION EXPOSURE

IF INHALED, REMOVE EXPOSED TO FRESH AIR. IF BREATHING IS DIFFICULT, IMMEDIATELY CONSULT A PHYSICIAN.

### DERMAL EXPOSURE

IN CASE OF EXPOSURE, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IMMEDIATELY CONSULT 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.

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

#### CONDITIONS OF FLAMMABILITY

**EXTINGUISHING MEDIA** 

SUITABLE: FOR SMALL (INCIPIENT) FIRES, USE MEDIA SUCH AS

"ALCOHOL" FOAM, DRY CHEMICAL, OR CARBON DIOXIDE. FOR LARGE

FIRES, APPLY WATER FROM AS FAR AS POSSIBLE. USE VERY LARGE

OUANTITIES (FLOODING) OF WATER APPLIED AS A MIST OR SPRAY; SOLID

STREAMS OF WATER MAY BE INEFFECTIVE. COOL ALL AFFECTED

CONTAINERS WITH FLOODING QUANTITIES OF WATER.

#### **FIREFIGHTING**

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SPECIFIC METHOD(S) OF FIRE FIGHTING: USE WATER SPRAY TO COOL

FIRE-EXPOSED CONTAINERS.

SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

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

#### PERSONAL PRECAUTIONS

WEAR RESPIRATORY PROTECTION. AVOID DUST FORMATION. AVOID BREATHING DUST, VAPORS, MIST OR GAS. ENSURE ADEQUATE VENTILATION.

ENVIRONMENTAL PRECAUTIONS

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP SWEEP UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

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

#### HANDLING

USER EXPOSURE: AVOID DUST FORMATION. AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. STORAGE

SUITABLE: TIGHTLY CLOSED CONTAINERS IN A DRY AND WELL-VENTILATED PLACE. LIGHT SENSITIVE.

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

## **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A DUST MASK TYPE N95 (US) OR TYPE P1 (EN 143) RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

HAND: HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. WASH AND DRY HANDS.

EYE: TIGHTLY FITTING CHEMICAL SAFETY GOGGLES.

#### GENERAL HYGIENE MEASURES

WASH HANDS AFTER HANDLING. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

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

APPEARANCE AND ODOR

LIQUID.

PHYSICAL PROPERTIES

BOILING POINT: 84 °C @ 0.1 mmHg

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

#### STABILITY

STABLE: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

MATERIALS TO AVOID: OXIDIZING AGENTS. ACIDS, ACID CHLORIDES, ACID ANHYDRIDES. CONDITIONS TO AVOID: HEAT, FLAMES AND SPARKS. EXTREMES OF TEMPERATURE. DIRECT SUNLIGHT.

#### HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS: CARBON OXIDES, HYDROGEN CHLORIDE GAS, NITROGEN OXIDES.

HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

#### SECTION 11, ----- TOXICOLOGICAL INFORMATION -----

#### ROUTE OF EXPOSURE

INHALATION: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION.

INGESTION: HARMFUL IF SWALLOWED.

SKIN: HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION.

EYES: CAUSES EYE IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE

ABSORPTION INTO THE BODY LEADS TO THE FORMATION OF METHEMOGLOBIN WHICH IN SUFFICIENT CONCENTRATION CAUSES CYANOSIS. ONSET MAY BE DELAYED 2 TO 4 HOURS OR LONGER.

TO THE BEST OF OUR KNOWLEDGE, THE TOXICOLOGICAL PROPERTIES OF THIS PRODUCT HAVE NOT BEEN FULLY DETERMINED.

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

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL.

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY.
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 -----

UN2810 - HC: 6.1 - PG: III

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

EU ADDITIONAL CLASSIFICATION
SYMBOL OF DANGER: Xn, Xi
INDICATION OF DANGER: HARMFUL. IRRITANT.
RISK STATEMENTS: 20/21/22-36/37/38
SAFETY STATEMENTS: 23-24/25-26-36/37/39-45
UNITED STATES REGULATORY INFORMATION
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.