

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 3137-1-00

NAME: TETRAETHYLAMMONIUM CYANIDE

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

CAS NUMBER: 13435-20-6 MDL NUMBER: MFCD00066552 MOLECULAR FORMULA: C9H20N2 MOLECULAR WEIGHT: 156.27

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

#### LABEL PRECAUTIONARY STATEMENTS

FATAL.

FATAL IF SWALLOWED, IN CONTACT WITH SKIN, OR IF INHALED VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. IRRITANT.

IRRITANT BY INHALATION, IN CONTACT WITH SKIN AND TO EYES. MAY CAUSE SENSITIZATION BY SKIN CONTACT.

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

## ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH COPIOUS AMOUNTS OF WATER PROVIDED PERSON IS CONSCIOUS.

## INHALATION EXPOSURE

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

#### DERMAL EXPOSURE

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

#### 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 -----

FLASH POINT
NOT ESTABLISHED.
SUITABLE EXTINGUISHING MEDIA
DRY POWDER FIREFIGHTING

PROTECTIVE EQUIPMENT
WEAR SELE CONTAINED BREATHING

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-----

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES WEAR RESPIRATORY PROTECTION. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.

**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 AND MATERIALS FOR CONTAINMENT AND CLEANING UP

PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING DUST. SWEEP UP AND SHOVEL. DO NOT FLUSH WITH WATER. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

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

#### **HANDLING**

USER EXPOSURE: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. STORAGE

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. NEVER ALLOW PRODUCT TO GET IN CONTACT WITH WATER DURING STORAGE. DO NOT STORE NEAR ACIDS. HYGROSCOPIC.

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

#### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: 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. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

HAND: PROTECTIVE GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE.

EYE: CHEMICAL SAFETY GOGGLES.

SKIN AND BODY: IMPERVIOUS CLOTHING, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING.

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

APPEARANCE AND ODOR

**SOLID** 

PHYSICAL PROPERTIES

MELTING POINT: 250 (DEC) °C

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

REACTIVITY

CONTACT WITH ACIDS LIBERATES VERY TOXIC GAS.

CHEMICAL STABILITY

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

INCOMPATIBLE MATERIALS

**ACIDS** 

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

#### SIGNS AND SYMPTOMS OF EXPOSURE

TREAT AS CYANIDE POISONING. ALWAYS HAVE ON HAND A CYANIDE FIRST-AID KIT, TOGETHER WITH PROPER INSTRUCTIONS. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

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

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL. VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER
BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. OFFER
SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY.
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS
MATERIAL. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

## SECTION 14. ----- TRANSPORT INFORMATION -----

UN2811 - HC 6.1 - PG II

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

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: T+, N

INDICATION OF DANGER: VERY TOXIC, DANGEROUS FOR THE ENVIRONMENT.

RISK STATEMENTS: R26/27/28,R32,R50/53

SAFETY STATEMENTS: S7,S22,S24/25,S26,S28,S29,S36/37/39,S45,S60,S61

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.