

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

Date last revised: May 29, 2015 Date printed: May 29, 2015

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

CATALOG #: 6177-3-X3

NAME: DIETHYL (1H,1H,2H,2H-HEPTADECAFLUORODEC-1-YL)PHOSPHONATE

SYNONYMS: DIETHYL (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-HEPTADECAFLUORO

DEC-1-YL)PHOSPHONATE

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

CAS NUMBER: 90146-96-6 MDL NUMBER: MFCD19105611

MOLECULAR FORMULA: C₁₄H₁₄F₁₇O₃P

MOLECULAR WEIGHT: 584,21

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

LABEL PRECAUTIONARY STATEMENTS

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

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

NOT ESTABLISHED

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 QUANTITIES (FLOODING) OF WATER APPLIED AS A MIST OR SPRAY; SOLID STREAMS OF WATER MAY BE INEFFECTIVE. COOL ALL AFFECTED CONTAINERS WITH FLOODING OUANTITIES OF WATER.

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: HARMFUL.

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 AN APPROPRIATE MATERIAL, 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. KEEP AWAY FROM HEAT AND OPEN FLAME. 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.

APPEARANCE AND ODOR LIQUID PHYSICAL PROPERTIES **BOILING POINT** 70-75 °C @ 0.03 mmHg SECTION 10. -----STABILITY AND REACTIVITY -----STABILITY MATERIALS TO AVOID: STRONG OXIDIZING AGENTS. HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE, PHOSPHOROUS OXIDES. SECTION 11. - - - - TOXICOLOGICAL INFORMATION - - - - -**ACUTE EXPOSURE** NO DATA AVAILABLE. 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 THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR EOUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. ----- TRANSPORT INFORMATION -----UNRESTRICTED SECTION 15. ----- REGULATORY INFORMATION -----EU ADDITIONAL CLASSIFICATION SYMBOL OF DANGER: Xn INDICATION OF DANGER: HARMFUL. RISK STATEMENTS: 20/21/22-36/37/38 SAFETY STATEMENTS: 3/7-23-24/25-26-36/37/39-45 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.

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