Valid 05/2002 - 07/2002

Aldrich Chemical Co., Inc. 1001 West St. Paul Milwaukee, WI 53233 USA Tel: 414-273-3850

MATERIAL SAFETY DATA SHEET

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SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -
   CATALOG #:
                        D901
                         DECANE, 99+%
SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
   CAS #: 124-18-5
   MF: C10H22
   EC NO: 204-686-4
 SYNONYMS
   N-DECANE *
SECTION 3. - - - - - - - - - HAZARDS IDENTIFICATION - - - - - - -
 LABEL PRECAUTIONARY STATEMENTS
   COMBUSTIBLE (USA)
   FLAMMABLE (EU)
   TRRITANT
   IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
   TARGET ORGAN(S):
   KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
   IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
   WATER AND SEEK MEDICAL ADVICE.
   WEAR SUITABLE PROTECTIVE CLOTHING.
SECTION 4. - - - - - - - FIRST-AID MEASURES- - - - - - - -
   IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
   CALL A PHYSICIAN.
   IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
   RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
   IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
   AMOUNTS OF WATER.
   IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
   WATER FOR AT LEAST 15 MINUTES.
SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - - - -
  EXTINGUISHING MEDIA
   CARBON DIOXIDE.
   DRY CHEMICAL POWDER.
  SPECIAL FIREFIGHTING PROCEDURES
   WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
   PREVENT CONTACT WITH SKIN AND EYES.
  UNUSUAL FIRE AND EXPLOSIONS HAZARDS
   COMBUSTIBLE LIQUID.
SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - -
   SHUT OFF ALL SOURCES OF IGNITION.
   WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
   RUBBER GLOVES.
   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- - - - - - - - -
   REFER TO SECTION 8.
SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
   WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
   GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
   SAFETY SHOWER AND EYE BATH.
   MECHANICAL EXHAUST REQUIRED.
   DO NOT BREATHE VAPOR.
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AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
   WASH THOROUGHLY AFTER HANDLING.
   IRRITANT.
   KEEP TIGHTLY CLOSED.
   KEEP AWAY FROM HEAT AND OPEN FLAME.
   STORE IN A COOL DRY PLACE.
SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - -
 PHYSICAL PROPERTIES
   BOILING POINT:
                        174 C
   MELTING POINT:
                             115 F
   FLASHPOINT
   EXPLOSION LIMITS IN AIR:
                                             2.6%
     UPPER
                                             0.8%
     LOWER
   AUTOIGNITION TEMPERATURE:
                                   410 F
   VAPOR PRESSURE: 1MM 16.5 C 3.77MM 37.7 C
   SPECIFIC GRAVITY:
                       0.730
   VAPOR DENSITY: 4.9
SECTION 10. - - - - - - - - STABILITY AND REACTIVITY - - - -
 INCOMPATIBILITIES
   OXIDIZING AGENTS
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
   CARBON MONOXIDE, CARBON DIOXIDE
SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - -
 ACUTE EFFECTS
   CAUSES SKIN IRRITATION.
   MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
   VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER
   RESPIRATORY TRACT.
   A SIMPLE ASPHYXIANT. EXPOSURE CAN CAUSE ANESTHETIC ACTION, DIFFICULTY IN
   BREATHING, HEADACHE, AND DIZZINESS.
   PROLONGED EXPOSURE CAN CAUSE:
   NARCOTIC EFFECT
   DERMATITIS
 CHRONIC EFFECTS
   TARGET ORGAN(S):
   NERVES
 RTECS #: HD6550000
   DECANE
  TOXICITY DATA
   IHL-RAT LC50:>1369 PPM/8H
                                                PHTOEH 62,259,1988
                                                GTPZAB 26(8),53,1982
   IHL-MUS LC50:72300 MG/M3/2H
  TARGET ORGAN DATA
   BEHAVIORAL (ALTERED SLEEP TIME)
   ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
    (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
   COMPLETE INFORMATION.
SECTION 12. - - - - - - ECOLOGICAL INFORMATION - - - - - - -
   DATA NOT YET AVAILABLE.
SECTION 13. - - - - - - DISPOSAL CONSIDERATIONS - - - - - - -
    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 - - - - - -
   CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - -
  EUROPEAN INFORMATION
   FLAMMABLE
   IRRITANT
   R 1
   FLAMMABLE
   R 36/37/38
    IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
    KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
    IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
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WATER AND SEEK MEDICAL ADVICE.

S 36

WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

NOHS 1974: HZD A1315; NIS 3; TNF 666; NOS 3; TNE 716

NOES 1983: HZD A1315; NIS 3; TNF 80; NOS 4; TNE 1667; TFE 43

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

NIOSH ANALYTICAL METHOD, 1996: VOLATILE ORGANIC COMPOUND, 2549

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. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR

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