Valid 11/2002 - 01/2003

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- - - - - - -
                         235830
   CATALOG #:
                         P-ACETOPHENETIDIDE, 97%
   NAME:
SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
   CAS #: 62-44-2
   MF: C10H13NO2
   EC NO: 200-533-0
  SYNONYMS
   ACETAMIDE, N-(4-ETHOXYPHENYL)- (9CI) * 1-ACETAMIDO-4-ETHOXYBENZENE *
    ACETANILIDE, 4'-ETHOXY- * ACETO-PARA-PHENALIDE * P-ACETOPHENETIDE *
    ACETO-PARA-PHENETIDIDE * PARA-ACETOPHENETIDIDE * ACETOPHENETIDIN *
    ACETOPHENETIDINE * P-ACETOPHENETIDINE * ACETO-4-PHENETIDINE *
    ACETOPHENETIN * ACET-P-PHENALIDE * ACETPHENETIDIN * P-ACETPHENETIDIN *
     ACET-P-PHENETIDIN * ACETYLPHENETIDIN * N-ACETYL-P-PHENETIDINE *
    ACHROCIDIN * ANAPAC * BROMO SELTZER * BUFF-A-COMP * CITRA-FORT *
    CLISTANOL * CODEMPIRAL * COMMOTIONAL * CONTRADOL * CONTRADOULEUR *
    CORICIDIN * CORIFORTE * CORYBAN-D * DAPRISAL * DARVON COMPOUND *
    DASIKON * DASIN * DASIN CH * DOLOSTOP * EDRISAL * EMPIRAL * EMPRAZIL *
     EMPRAZIL-C * EPRAGEN * P-ETHOXYACETANILIDE * 4-ETHOXYACETANILIDE *
    4'-ETHOXYACETANILIDE * P-ETHOXYANILID KYSELINY OCTOVE (CZECH) * N-
    PARA-ETHOXYPHENYLACETAMIDE * N-(4-ETHOXYPHENYL)ACETAMIDE * FENACETIN
    (CZECH) * FENACETINA * FENIDINA * FENIA * FENINA * FIORINAL *
    FORTACYL * GELONIDA * GEWODIN * HELVAGIT * HJORTON'S POWDER *
    HOCOPHEN * KAFA * KALMIN * MALEX * MELABON * MELAFORTE * NORGESIC *
    PAMPRIN * PARACETOPHENETIDIN * PARAMETTE * PARATODOL * PERTONAL *
    PHENACETIN * PARA-PHENACETIN * PHENACETINE * PHENACETINUM *
    PHENACITIN * PHENAPHEN * PHENAPHEN PLUS * PHENAZETIN * PHENAZETINA *
    PHENEDINA * P-PHENETIDINE, N-ACETYL- * PHENIDIN * PHENIN * PHENODYNE *
     PYRAPHEN * PYRROXATE * QUADRONAL * RCRA WASTE NUMBER U187 *
    ROBAXISAL-PH * SALGYDAL * SANALGINE * SARIDON * SERANEX * SINEDAL *
    SINUBID * SINUTAB * STELLACYL * SUPER ANAHIST * SYNALGOS-DC *
    SYNALOGOS * TACOL * TETRACYDIN * THEPHORIN A-C * TREUPEL * VEGANINE *
    VIDEN * WIGRAINE * XARIL *
SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - -
  LABEL PRECAUTIONARY STATEMENTS
    TOXIC
    MAY CAUSE CANCER.
    HARMFUL IF SWALLOWED.
    TARGET ORGAN(S):
    BLOOD
    PROBABLE CARCINOGEN (US)
    AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
    WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.
     IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
    IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
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 BREATHING BECOMES DIFFICULT,
     CALL A PHYSICIAN.
     IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
     AMOUNTS OF WATER.
     IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER
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FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING
   THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.
SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - - - - -
 EXTINGUISHING MEDIA
   WATER SPRAY.
   CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.
 SPECIAL FIREFIGHTING PROCEDURES
   WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
    PREVENT CONTACT WITH SKIN AND EYES.
 UNUSUAL FIRE AND EXPLOSIONS HAZARDS
   EMITS TOXIC FUMES UNDER FIRE CONDITIONS.
SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - -
   WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
    RUBBER GLOVES.
    WEAR DISPOSABLE COVERALLS AND DISCARD THEM AFTER USE.
    SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
    AVOID RAISING DUST.
    VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
    EVACUATE AREA.
SECTION 7. - - - - - - - HANDLING AND STORAGE- - - - -
    REFER TO SECTION 8.
SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
    USE ONLY IN A CHEMICAL FUME HOOD.
    SAFETY SHOWER AND EYE BATH.
    WASH CONTAMINATED CLOTHING BEFORE REUSE.
    WASH THOROUGHLY AFTER HANDLING.
    DO NOT BREATHE DUST.
    DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
    AVOID PROLONGED OR REPEATED EXPOSURE.
    NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR
    EXPOSURE ABOVE THE ACGIH TLV.
    COMPATIBLE CHEMICAL-RESISTANT GLOVES.
    CHEMICAL SAFETY GOGGLES.
    KEEP TIGHTLY CLOSED.
    STORE IN A COOL DRY PLACE.
SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - -
  APPEARANCE AND ODOR
    WHITE POWDER
  PHYSICAL PROPERTIES
    MELTING POINT: 134 C TO 136 C
SECTION 10. - - - - - - - STABILITY AND REACTIVITY - - - -
  STABILITY
    STABLE.
  INCOMPATIBILITIES
    STRONG OXIDIZING AGENTS
    STRONG ACIDS
    STRONG BASES
    STRONG REDUCING AGENTS
  HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
    CARBON MONOXIDE, CARBON DIOXIDE
    NITROGEN OXIDES
  HAZARDOUS POLYMERIZATION
    WILL NOT OCCUR.
                      - - - TOXICOLOGICAL INFORMATION - - - - - -
SECTION 11. - - - -
  ACUTE EFFECTS
    MAY CAUSE SKIN IRRITATION.
    MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
    MAY CAUSE EYE IRRITATION.
    MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER
    RESPIRATORY TRACT.
    MAY BE HARMFUL IF INHALED.
    HARMFUL IF SWALLOWED.
    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.
  CHRONIC EFFECTS
    THIS PRODUCT IS OR CONTAINS A COMPONENT THAT HAS BEEN REPORTED TO BE
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PROBABLY CARCINOGENIC BASED ON ITS IARC, OSHA, ACGIH, NTP OR EPA
   CLASSIFICATION.
   TARGET ORGAN(S):
   BLOOD, KIDNEYS
   LIVER
 RTECS #: AM4375000
   P-ACETOPHENETIDIDE
 TOXICITY DATA
                                                 85DCAI 2,73,1970
   UNR-MAN LDLO:74 MG/KG
                                                 TXAPA9 1,240,1959
   ORL-RAT LD50:1650 MG/KG
                                                 NYKZAU 62,11,1966
   IPR-RAT LD50:634 MG/KG
                                                 ARZNAD 28,1644,1978
   ORL-MUS LD50:866 MG/KG
                                                 GISAAA 34(10),36,1969
   IHL-MUS LC50:33900 MG/M3
                                                 YKKZAJ 81,659,1961
   IPR-MUS LD50:540 MG/KG
                                                 ARZNAD 8,25,1958
   SCU-MUS LD50:1625 MG/KG
                                                 GTPZAB 21(9),53,1977
   ORL-RBT LD50:2500 MG/KG
                                                 ARZNAD 21,719,1971
   SCU-RBT LD50:1 GM/KG
                                                 TXAPA9 2,23,1960
   ORL-GPG LD50:1870 MG/KG
                                                 PHARAT 8,572,1953
   ORL-HAM LD50:1690 MG/KG
 TARGET ORGAN DATA
   BEHAVIORAL (SOMNOLENCE)
   BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
   BEHAVIORAL (ATAXIA)
   BEHAVIORAL (COMA)
   CARDIAC (PULSE RATE INCREASED WITHOUT FALL IN BP)
   CARDIAC (PULSE RATE DECREASED WITH FALL IN BP)
   LUNGS, THORAX OR RESPIRATION (RESPIRATORY DEPRESSION)
   NUTRITIONAL AND GROSS METABOLIC (BODY TEMPERATURE DECREASE)
   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 - - - - - -
    CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
    THIS MATERIAL.
   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
    TOXIC
    R 45
    MAY CAUSE CANCER.
    R 22
    HARMFUL IF SWALLOWED.
    AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
    S 45
    IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
    IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
  REVIEWS, STANDARDS, AND REGULATIONS
    OEL-MAK
    IARC CANCER REVIEW: ANIMAL SUFFICIENT EVIDENCE IMSUDL 7,310,1987
    IARC CANCER REVIEW: HUMAN LIMITED EVIDENCE IMEMDT 24,135,1980
                                                  IMSUDL 7,310,1987
    IARC CANCER REVIEW: GROUP 2A
    OEL-RUSSIA: STEL 0.5 MG/M3, JAN1993
    NOHS 1974: HZD 80478; NIS 2; TNF 126; NOS 10; TNE 4186
    NOES 1983: HZD X4389; NIS 1; TNF 9; NOS 2; TNE 869; TFE 617
    NOES 1983: HZD 80478; NIS 4; TNF 1271; NOS 12; TNE 18808; TFE 15338
    EPA GENETOX PROGRAM 1988, POSITIVE: CARCINOGENICITY-MOUSE/RAT
    EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
    NTP 9TH REPORT ON CARCINOGENS, 2000: REASONABLY ANTICIPATED TO BE HUMAN
     CARCINOGEN
  U.S. INFORMATION
    THIS PRODUCT IS OR CONTAINS CHEMICAL(S) KNOWN TO THE STATE OF
    CALIFORNIA TO CAUSE CANCER.
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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 PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE. COPYRIGHT 2001 SIGMA-ALDRICH CO. LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY