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## MATERIAL SAFETY DATA SHEET

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SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION- - - - - - -
                         131547
   CATALOG #:
                         L-PROLINE, 99+% (98% EE/GLC)
   NAME:
SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
   CAS #: 147-85-3
   MF: C5H9NO2
   EC NO: 205-702-2
  SYNONYMS
   CB 1707 * (-)-PROLINE * (-)-(S)-PROLINE * L-PROLINE (9CI) * L-(-)-
    PROLINE * (S)-PROLINE * L-ALPHA-PYRROLIDINECARBOXYLIC ACID * (-)-2-
    PYRROLIDINECARBOXYLIC ACID * L-PYRROLIDINE-2-CARBOXYLIC ACID * L-
   ALPHA-PYRROLIDINECARBOXYLIC ACID * (S)-2-PYRROLIDINECARBOXYLIC ACID *
    2-PYRROLIDINECARBOXYLIC ACID * 2-PYRROLIDINECARBOXYLIC ACID, (S)- *
SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -
    DATA NOT AVAILABLE
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
    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 RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
    RUBBER GLOVES.
    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.
SECTION 7. - - - - - - HANDLING AND STORAGE- - - - - - -
    REFER TO SECTION 8.
SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
    SAFETY SHOWER AND EYE BATH.
    MECHANICAL EXHAUST REQUIRED.
    AVOID INHALATION.
    AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
    AVOID PROLONGED OR REPEATED EXPOSURE.
    NIOSH/MSHA-APPROVED RESPIRATOR.
    COMPATIBLE CHEMICAL-RESISTANT GLOVES.
    CHEMICAL SAFETY GOGGLES.
    KEEP TIGHTLY CLOSED.
    STORE IN A COOL DRY PLACE.
    WASH THOROUGHLY AFTER HANDLING.
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SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -
  APPEARANCE AND ODOR
   WHITE CRYSTALLINE POWDER
  PHYSICAL PROPERTIES
                       228 C (DEC)
   MELTING POINT:
    SOLUBILITY:
          WATER -Z26130
                            6.0 - 7.0
SECTION 10. - - - - - - - - STABILITY AND REACTIVITY - - - - - - -
  STABILITY
    STABLE.
  INCOMPATIBILITIES
    STRONG OXIDIZING AGENTS
  HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
    CARBON MONOXIDE, CARBON DIOXIDE
    NITROGEN OXIDES
  HAZARDOUS POLYMERIZATION
    WILL NOT OCCUR.
SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - -
  ACUTE EFFECTS
    MAY CAUSE SKIN IRRITATION.
    MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
    MAY CAUSE EYE IRRITATION.
    MAY BE HARMFUL IF INHALED.
    MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER
    RESPIRATORY TRACT.
    MAY BE HARMFUL IF SWALLOWED.
    TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
    TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
  RTECS #: TW3584000
    PROLINE, L-
    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.
    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 - - - - - - -
    CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - -
  REVIEWS, STANDARDS, AND REGULATIONS
    OEL=MAK
    NOHS 1974: HZD 81957; NIS 1; TNF 53; NOS 3; TNE 750
    NOES 1983: HZD 81957; NIS 4; TNF 762; NOS 14; TNE 18391; TFE 13943
    EPA GENETOX PROGRAM 1988, NEGATIVE: HOST-MEDIATED ASSAY
    EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
 SECTION 16. - - - - - - - - - OTHER INFORMATION- - - - - - - - -
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