Valid 02/1999 - 04/1999

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MATERIAL SAFETY DATA SHEET

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SECTION 1. - - - - - - CHEMICAL IDENTIFICATION- - - - - -
                         G8270
   CATALOG #:
                         D-(+)-GLUCOSE
   NAME:
SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
   CAS #: 50-99-7
   MF: C6H12O6
   EC NO: 200-075-1
  SYNONYMS
   ANHYDROUS DEXTROSE * CARTOSE * CERELOSE * CORN SUGAR * DEXTROPUR *
    DEXTROSE * DEXTROSE, ANHYDROUS * DEXTROSOL * GLUCOLIN * GLUCOSE *
   GLUCOSE, ANHYDROUS * D-GLUCOSE, ANHYDROUS * GLUCOSE LIQUID * GRAPE
    SUGAR * SIRUP * SUGAR, GRAPE *
SECTION 3. - - - - - - - - HAZARDS IDENTIFICATION - - - - - - -
    DATA NOT AVAILABLE
SECTION 4. - - - - - - - - FIRST-AID MEASURES- - - - - - - -
    IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
   WATER FOR AT LEAST 15 MINUTES.
    IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
   AMOUNTS OF WATER.
    IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
    RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
    IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
    CALL A PHYSICIAN.
    WASH CONTAMINATED CLOTHING BEFORE REUSE.
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- - - - - -
    CHEMICAL SAFETY GOGGLES.
    USE PROTECTIVE CLOTHING, GLOVES AND MASK.
    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- - - -
    CHEMICAL SAFETY GOGGLES.
    COMPATIBLE CHEMICAL-RESISTANT GLOVES.
    NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR
    EXPOSURE ABOVE THE ACGIH TLV.
    SAFETY SHOWER AND EYE BATH.
    MECHANICAL EXHAUST REQUIRED.
    DO NOT BREATHE DUST.
    DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
    WASH THOROUGHLY AFTER HANDLING.
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KEEP TIGHTLY CLOSED.
   STORE IN A COOL DRY PLACE.
SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - -
 APPEARANCE AND ODOR
   FINE WHITE CRYSTALS
 PHYSICAL PROPERTIES
   MELTING POINT: 153 C TO 156 C
SECTION 10. - - - - - - - - - STABILITY AND REACTIVITY - - -
  INCOMPATIBILITIES
   STRONG OXIDIZING AGENTS
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
   TOXIC FUMES OF:
   CARBON MONOXIDE, CARBON DIOXIDE
SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - -
 ACUTE EFFECTS
   MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
   MAY CAUSE IRRITATION.
 RTECS #: LZ6600000
    D-GLUCOSE
  TOXICITY DATA
                                                 85AIAL -,39,1973
   ORL-RAT LD50:25800 MG/KG
                                                 PSEBAA 35,98,1936
    IPR-MUS LD50:18 GM/KG
                                                 ARZNAD 18,666,1968
    IVN-MUS LD50:9 GM/KG
  TARGET ORGAN DATA
   MATERNAL EFFECTS (OTHER EFFECTS ON FEMALE)
    EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
   EFFECTS ON EMBRYO OR FETUS (OTHER EFFECTS TO EMBYRO OR FETUS)
   SPECIFIC DEVELOPMENTAL ABNORMALITIES (CRANIOFACIAL)
    SPECIFIC DEVELOPMENTAL ABNORMALITIES (HEPATOBILIARY SYSTEM)
    SPECIFIC DEVELOPMENTAL ABNORMALITIES (UROGENITAL SYSTEM)
    SPECIFIC DEVELOPMENTAL ABNORMALITIES (OTHER DEVELOPMENTAL ABNORMALITIES)
    EFFECTS ON NEWBORN (BIOCHEMICAL AND METABOLIC)
    EFFECTS ON NEWBORN (BEHAVIORAL)
    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 - - - - - - - -
    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 SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - -
  REVIEWS, STANDARDS, AND REGULATIONS
    OEL=MAK
    NOHS 1974: HZD 81836; NIS 117; TNF 16738; NOS 90; TNE 136870
    NOES 1983: HZD 81836; NIS 86; TNF 11017; NOS 102; TNE 363666; TFE
     186490
    EPA GENETOX PROGRAM 1988, NEGATIVE: SPERM MORPHOLOGY-MOUSE
    EPA GENETOX PROGRAM 1988, INCONCLUSIVE: MAMMALIAN MICRONUCLEUS
    EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
    EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES
    EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JUNE 1998
SECTION 16. - - - - - - OTHER INFORMATION - - - - - -
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