## PRODUCT #: 72245 NAME: NICKEL(II) CARBONATE BASIC HYDRATE MATERIAL SAFETY DATA SHEET, Valid 11/97 - 1/98 Printed Wednesday, March 12, 1903 4:17PM

Aldrich Chemical Co., Inc. Fluka Chemical Corp. Sigma Chemical Co. 

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 P.O. Box 14508 St. Louis, MO 63178 Phone: 314-771-5765 SECTION 1. - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -CATALOG #: 72245 NAME: NICKEL(II) CARBONATE BASIC HYDRATE SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -3333-67-3 CAS #: EC NO: 222-068-2 SYNONYMS CARBONIC ACID, NICKEL SALT (1:1) \* C.I. 77779 \* NICKEL(2+) CARBONATE \* NICKEL MONOCARBONATE \* NICKELOUS CARBONATE \* SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -LABEL PRECAUTIONARY STATEMENTS TOXIC MAY CAUSE CANCER. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. DO NOT BREATHE DUST. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. KEEP CONTAINER TIGHTLY CLOSED IN A COOL WELL-VENTILATED PLACE. SECTION 4. - - - - - - - - FIRST-AID MEASURES- - - - - - - - - - -IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. 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. DISCARD CONTAMINATED CLOTHING AND SHOES. 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- - - - - - - -EVACUATE AREA. 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. 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

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GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
   SAFETY SHOWER AND EYE BATH.
   USE ONLY IN A CHEMICAL FUME HOOD.
   DO NOT BREATHE DUST.
   AVOID ALL CONTACT.
   WASH THOROUGHLY AFTER HANDLING.
   CARCINOGEN.
   HARMFUL SOLID.
   KEEP TIGHTLY CLOSED.
   STORE IN A COOL DRY PLACE.
SECTION 9. - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - -
 APPEARANCE AND ODOR
   SOLID.
 PHYSICAL PROPERTIES
   SOLUBILITY:
          WATER -INSOLUBLE
       (DILUTE ACIDS): SOLUBLE
INCOMPATIBILITIES
   STRONG OXIDIZING AGENTS
   STRONG ACIDS
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
   TOXIC FUMES OF:
   CARBON MONOXIDE, CARBON DIOXIDE
SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - -
 ACUTE EFFECTS
   HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
   MAY CAUSE IRRITATION.
   EXPOSURE CAN CAUSE:
   GASTROINTESTINAL DISTURBANCES
 CHRONIC EFFECTS
   CARCINOGEN.
   LUNG IRRITATION
   DERMATITIS
   TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
   TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
 RTECS #: QR6200000
   NICKEL(II) CARBONATE (1:1)
 TARGET ORGAN DATA
   PERIPHERAL NERVE AND SENSATION (FLACCID PARALYSIS WITHOUT ANESTHESIA)
   LUNGS, THORAX OR RESPIRATION (DYSPNAE)
   LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
   TUMORIGENIC (EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA)
   TUMORIGENIC (TUMORS AT SITE OF APPLICATION)
   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 - - - -
   BURY IN A LANDFILL SITE APPROVED FOR THE DISPOSAL OF CHEMICAL
   AND HAZARDOUS WASTES.
   OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.
SECTION 14. - - - - - - - TRANSPORT INFORMATION - - - - - - -
   CONTACT FLUKA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - - -
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EUROPEAN INFORMATION

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028-010-00-0
   EC INDEX NO:
   TOXIC
   R 22
   HARMFUL IF SWALLOWED.
   POSSIBLE RISK OF IRREVERSIBLE EFFECTS.
   MAY CAUSE SENSITIZATION BY SKIN CONTACT.
   S 22
   DO NOT BREATHE DUST.
   s 36/37
   WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.
 REVIEWS, STANDARDS, AND REGULATIONS
   OEL=MAK
   ACGIH TLV-TWA 1 MG(NI)/M3
                                                  DTLVS* TLV/BEI, 1996
   IARC CANCER REVIEW: ANIMAL SUFFICIENT EVIDENCE IMEMDT 11,75,1976
   IARC CANCER REVIEW: ANIMAL LIMITED EVIDENCE
                                               IMEMDT 49,257,1990
   MSHA STANDARD-AIR: TWA 1 MG(NI)/M3
    DTLVS* 3,178,1971
   OSHA PEL (GEN INDU):8H TWA 1 MG(NI)/M3
    CFRGBR 29,1910.1000,1994
   OSHA PEL (CONSTRUC):8H TWA 1 MG(NI)/M3
    CFRGBR 29,1926.55,1994
   OSHA PEL (SHIPYARD):8H TWA 1 MG(NI)/M3
    CFRGBR 29,1915.1000,1993
   OSHA PEL (FED CONT):8H TWA 1 MG(NI)/M3
    CFRGBR 41,50-204.50,1994
   OEL-GERMANY; CARCINOGEN JAN 1993
   OEL-SWEDEN: TWA 0.1 MG/M3; CARCINOGEN JAN 1993
   OEL-SWITZERLAND: TWA 0.5 MG/M3; SKIN; CARCINOGEN JAN 1993
   OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV
   OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
   NIOSH REL TO NICKEL, INORGANIC-AIR: 10H CA TWA 0.015 MG(NI)/M3
    NIOSH* DHHS #92-100,1992
   NOHS 1974: HZD 81905; NIS 12; TNF 349; NOS 9; TNE 4696
   NOES 1983: HZD 81905; NIS 28; TNF 864; NOS 23; TNE 13040; TFE 2017
   EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
   NTP 7TH ANNUAL REPORT ON CARCINOGENS, 1992 : ANTICIPATED TO BE
    CARCINOGEN
 U.S. INFORMATION
   THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.
SECTION 16. - - - - - - - - OTHER INFORMATION- - - - - - - - - -
   THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
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