



15 Erie Drive
Natick, MA 01760
Phone: 508.655.4336
Fax: 508.655.2754
www.americanbio.com
In case of emergency call 3E at 800.451.8346

MATERIAL SAFETY DATA SHEET:
CALCIUM CHLORIDE DIHYDRATE
CATALOG NUMBER: AB00366

SECTION I – PRODUCT INFORMATION

PRODUCT NAME: CALCIUM CHLORIDE DIHYDRATE
GRADE: USP
PHYSICAL DESCRIPTION: WHITE POWDER

SECTION II – COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME: CALCIUM CHLORIDE DIHYDRATE
CAS NUMBER: 10035-04-8
SARA 313: NO
FORMULA: $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$
FORMULA WEIGHT: 147.01
RTECS NUMBER: EV9810000

SECTION III – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HARMFUL.

HARMFUL IF SWALLOWED. IRRITATING TO RESPIRATORY SYSTEM AND SKIN.

HMIS RATING

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

FOR ADDITIONAL INFORMATION ON TOXICITY, PLEASE REFER TO SECTION XI.

SECTION IV – FIRST AID MEASURES

ORAL EXPOSURE: IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

INHALATION EXPOSURE: IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.

DERMAL EXPOSURE: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

EYE EXPOSURE: 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 V – ACCIDENTAL RELEASE MEASURES

FLASH POINT: N/A

AUTOIGNITION: N/A

FLAMMABILITY: N/A

EXTINGUISHING MEDIA: SUITABLE: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

FIREFIGHTING: PROTECTIVE EQUIPMENT: WEAR SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SPECIFIC HAZARD: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION VI – ACCIDENTAL RELEASE MEASURES

PROCEDURES OF PERSONAL PRECAUTIONS: WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES. RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP: 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 VII – HANDLING AND STORAGE

HANDLING: USER EXPOSURE: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

STORAGE: SUITABLE: KEEP TIGHTLY CLOSED.

SECTION VIII – EXPOSURE CONTROLS/PPE

ENGINEERING CONTROLS: SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: GOVERNMENT APPROVED RESPIRATOR.

HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

GENERAL HYGIENE MEASURES: WASH THOROUGHLY AFTER HANDLING.

SECTION IX – PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE

COLOR: WHITE

FORM: FINE CRYSTALS

MOLECULAR WEIGHT: 147.01 AMU

PH: 5 - 8

MP/MP RANGE: 176°C

VAPOR PRESSURE: 0.01 MMHG 20°C

SOLUBILITY IN WATER: 1 M IN H₂O, 20°C COMPLETE, COLORLESS.

SECTION X – STABILITY AND REACTIVITY

STABILITY: STABLE

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE GAS, CALCIUM OXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION XI – TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES SKIN IRRITATION

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

EYE CONTACT: CAUSES EYE IRRITATION.

INHALATION: MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL IF INHALED.

INGESTION: HARMFUL IF SWALLOWED.

SIGNS AND SYMPTOMS OF EXPOSURE: TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

TOXICITY DATA: INTRAPERITONEAL

MOUSE

20500 MG/KG

LD50

SECTION XII – ECOLOGICAL INFORMATION

NO DATA AVAILABLE.

SECTION XIII – DISPOSAL INFORMATION

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

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 XIV – TRANSPORT INFORMATION

DOT – PROPER SHIPPING NAME: NONE

NON-HAZARDOUS FOR TRANSPORT: THIS SUBSTANCE IS CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT.

IATA – NON-HAZARDOUS FOR AIR TRANSPORT

SECTION XV – REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: Xn

INDICATION OF DANGER: HARMFUL

R: 22 36/37/38

RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S: 26 36

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: HARMFUL

RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

UNITED STATES REGULATORY INFORMATION – SARA LISTED: NO

CANADA REGULATORY INFORMATION

WHMIS CLASSIFICATION: THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR, AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

DSL: NO

NDSL: NO

SECTION XVI – OTHER INFORMATION

FOR R&D USE ONLY. NOT FOR DRUG, HOUSEHOLD OR OTHER USES.

REVISION DATE 06/22/05