

EMS CATALOG NO: 18010
EMS PRODUCT: Magnesium Chloride
Hexahydrate
DATE: 10/01/2008
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MATERIAL SAFETY DATA SHEET

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FOR PRODUCT AND SALES INFORMATION

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PRODUCT IDENTIFICATION

COMMON NAME: Magnesium Chloride Hexahydrate

COMMERCIAL NAME(S): Not available.

SYNONYM: Not available.

CHEMICAL NAME: Magnesium dichloride hexahydrate

CHEMICAL FAMILY: Chloride salt. (Salt.)

CHEMICAL FORMULA: MgCl₂·6H₂O

CAS#: 7791-18-6

RTECS: OM2975000

TSCA: On the TSCA list.

CI#: Not applicable.

COMPOSITION AND INFORMATION ON INGREDIENTS

NAME: Magnesium Chloride Hexahydrate

CAS#: 7791-18-6

% BY WEIGHT: 100

TOXICOLOGICAL DATA ON INGREDIENTS: Not applicable.

HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

Very slightly to slightly dangerous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

POTENTIAL CHRONIC HEALTH EFFECTS:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

Toxicity of the product to the reproductive system: Not available. There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.

FIRST AID MEASURES

EYE CONTACT:

IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.

SKIN CONTACT:

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.

SERIOUS SKIN CONTACT: No additional information.

INHALATION: Allow the victim to rest in a well ventilated area.
Seek immediate medical attention.

SERIOUS INHALATION: No additional information.

INGESTION:

Remove dentures if any. Have conscious person drink several glasses of water or milk. INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. NEVER give an unconscious person anything to ingest. Seek medical attention.

SERIOUS INGESTION: No additional information.

FIRE AND EXPLOSION DATA

FLAMMABILITY OF THE PRODUCT: Non-flammable.

AUTO-IGNITION TEMPERATURE: Not applicable.

FLASH POINTS: Not applicable.

FLAMMABLE LIMITS: Not applicable.

PRODUCTS OF COMBUSTION: Not applicable.

FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES: Not applicable.

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES:

RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF MECHANICAL

IMPACT: Not available.

RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF STATIC

DISCHARGE: Not available.

FIRE FIGHTING MEDIA AND INSTRUCTIONS: Non-flammable.

SPECIAL REMARKS ON FIRE HAZARDS: Store under nitrogen. When heated to decomposition it emits toxic fumes.

SPECIAL REMARKS ON EXPLOSION HAZARDS: No additional remarks.

ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of

according to local and regional authority requirements.

LARGE SPILL:

Our database contains no additional information in case of a spill and/or a leak of the product. Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

HANDLING AND STORAGE

PRECAUTIONS:

DO NOT breathe dust. Keep away from incompatibles as oxidizing agents.

STORAGE:

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

PERSONAL PROTECTION: Safety glasses. Lab coat.

PERSONAL PROTECTION IN CASE OF A LARGE SPILL:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

EXPOSURE LIMITS: Not available.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE AND APPEARANCE: Solid (Deliquescent crystals solid.)

ODOR: Not available.

TASTE: Not available.

COLOR: Not available.

MOLECULAR WEIGHT: 203.3

pH (1% SOLN/WATER): 7

BOILING POINT: Not available.

MELTING POINT: 118°C (244.4°F)

CRITICAL TEMPERATURE: Not available.

SPECIFIC GRAVITY: 1.59 (Water = 1)

VAPOR PRESSURE: Not available.

VAPOR DENSITY: Not available.

VOLATILITY: Not available.

ODOR THRESHOLD: Not available.

WATER/OIL DIST. COEFF.: Only soluble or dispersed in water.

IONICITY (IN WATER): Not available.

DISPERSION PROPERTIES: See solubility in water, methanol.

SOLUBILITY: Easily soluble in cold water, hot water, methanol.

Insoluble in diethyl ether, n-octanol.

STABILITY AND REACTIVITY DATA

STABILITY: The product is stable.

INSTABILITY TEMPERATURE: Not available.

CONDITIONS OF INSTABILITY: No additional remark.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES: Slightly reactive to reactive with oxidizing agents. Non -reactive with moisture.

CORROSIVITY: Non-corrosive in presence of glass.

SPECIAL REMARKS ON REACTIVITY: No additional remark.

SPECIAL REMARKS ON CORROSIVITY: No additional remark.

POLYMERIZATION: No.

TOXICOLOGICAL INFORMATION

ROUTES OF ENTRY: Ingestion.

TOXICITY TO ANIMALS:

Acute Oral Toxicity (LD50): 8100 mg/kg (Rat.).

CHRONIC EFFECTS ON HUMANS: Toxicity of the product to the reproductive system: Not available.

OTHER TOXIC EFFECTS ON HUMANS:

Very slightly to slightly dangerous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

SPECIAL REMARKS ON TOXICITY TO ANIMALS: No additional remark.

SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS: No additional remark.

SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMANS:

Material is irritating to mucous membranes and upper respiratory tract.

ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

BOD5 AND COD: Not available.

PRODUCTS OF BIODEGRADATION: Some metallic oxides.

TOXICITY OF THE PRODUCTS OF BIODEGRADATION: The products of degradation are more toxic.

SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION: No additional remark.

DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Recycle to process, if possible. Consult your local or regional authorities.

TRANSPORT INFORMATION

DOT CLASSIFICATION: Not a DOT controlled material (United States).

IDENTIFICATION: Not applicable (PIN and PG).

SPECIAL PROVISIONS FOR TRANSPORT: Not applicable.

OTHER REGULATORY INFORMATION

FEDERAL AND STATE REGULATIONS: Not available.

OTHER REGULATIONS: Our database contains no special consideration on the product.

OTHER CLASSIFICATIONS:

WHMIS (CANADA): Not controlled under WHMIS (Canada).

DSCLA (EEC): Not controlled under DSCL (Europe).

HMIS (U.S.A.):

HEALTH HAZARD: 1

FIRE HAZARD: 0

REACTIVITY: 0

PERSONAL PROTECTION: a

NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

SPECIFIC HAZARD:

PROTECTIVE EQUIPMENT: Lab coat.
Safety glasses.

OTHER SPECIAL CONSIDERATIONS: No additional remark.