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KR-F3312

MATERIAL SAFETY DATA SHEET

FOR EMERGENCY ASSISTANCE
CALL: 1-800-424-9300 CHEMTREC

FOR ADDITIONAL INFORMATION
CALL: 412-321-9800

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: **KR-F3312**
CHEMICAL DESCRIPTION: Aqueous blend of magnesium chloride and emulsion polymer
PRODUCT CLASS: Waste Treatment
VERSION: 5-14-2013

SECTION 2: INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV
Magnesium chloride, hexahydrate	7791-18-6	20-50	None established	None established

SECTION 3: HAZARDS IDENTIFICATION

*****EMERGENCY OVERVIEW*****

Hazy white liquid.
May cause minor eye and skin irritation.
May be harmful if ingested.
Product mist may cause respiratory tract irritation.
Product spills will make floors extremely slippery.

PRIMARY ROUTES OF ENTRY: Eye contact, skin contact, ingestion, and inhalation of product mist

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Conditions of the skin may be aggravated by overexposure to this product.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Contact may cause minor eye irritation.

SKINCONTACT: Contact may cause minor skin irritation.

INGESTION: This product contains magnesium chloride hexahydrate. Since magnesium salts are slowly absorbed, abdominal pain, vomiting, and diarrhea may be the only symptoms. However, if elimination is prevented by bowel blockage or other reasons, CNS depression, lack of reflexes, and hypocalcemia (deficiency of calcium in the blood) may occur.

INHALATION: This product does not present an inhalation hazard unless product mist is generated and inhaled. Inhalation of product mist may cause irritation to the respiratory tract.

SUBCHRONIC, CHRONIC: No applicable information was found concerning any potential health effects resulting from subchronic or chronic exposure to the product.

CARCINOGENICITY:

NTP: No ingredients listed in this section

IARC: No ingredients listed in this section

OSHA: No ingredients listed in this section

SECTION 4: FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally to ensure complete rinsing. Get medical attention if irritation persists.

SKIN CONTACT: In a timely manner, wash the affected area thoroughly with plenty of soap and water. Remove contaminated clothing. If irritation occurs, get medical attention. Wash clothing before reuse.

INGESTION: If victim is conscious and alert, rinse out mouth with water and give several glasses of water to drink. If large amounts of product were swallowed, get medical advice. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: IV administration of calcium gluconate will partially reverse the effects of acute magnesium toxicity. Ventricular support with calcium chloride infusion and mannitol forced diuresis has also been successful.

INHALATION: If inhaled, remove victim to fresh air. If breathing stops, give artificial respiration. If breathing is difficult, have a trained medical person give oxygen. Get medical attention if any breathing difficulty occurs.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT: Not applicable

This product is not considered a fire hazard.

LOWER FLAMMABLE LIMIT: Not applicable

UPPER FLAMMABLE LIMIT: Not applicable

AUTO-IGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Water stream may be ineffective. Use water spray, alcohol foam, carbon dioxide, or dry chemical to extinguish fires.

FIRE-FIGHTING INSTRUCTIONS: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential.

FIRE & EXPLOSION HAZARDS: This product is not considered an explosion hazard, however, the addition of magnesium chloride to furan-2-peroxycarboxylic acid at room temperature will cause the acid to explode.

HAZARDOUS DECOMPOSITION PRODUCTS: When magnesium chloride heptahydrate is heated to decomposition, it will emit corrosive hydrochloric acid vapor. When it is heated to temperatures above 572 °F (300 °C) it will emit toxic fumes of chlorine gas. Thermal decomposition or combustion of the polymer in this product may produce carbon monoxide, carbon dioxide, ammonia, and/or nitrogen oxides.

NFPA RATINGS: Health = 1 Flammability = 0 Reactivity = 0 Special Hazard = None

Hazard Rating Scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Notify appropriate government, occupational health and safety and environmental authorities. Stop or reduce any leaks if is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

METHODS FOR CLEAN-UP:

Small spills: Soak up spill with an inert absorbent material. Place residues in a suitable, covered, properly labeled container. Wash the affected area.

Large spills: Contain liquid using an inert absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material.

Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

WARNING: Water in contact with this product will cause slippery floor conditions.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Avoid contact with eyes, skin, and clothing.

Avoid breathing product mist.

Use with adequate ventilation.

Wash thoroughly after handling.

Do not take internally.

Keep containers closed when not in use.

Ensure that containers are properly labeled.

Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE:

Store in a cool, dry, well-ventilated area away from oxidizers and other incompatibles.

Do not store this product in metal containers.

Protect containers against physical damage.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical splash goggles

SKIN PROTECTION: Chemical resistant gloves and clean body covering clothing.

RESPIRATORY PROTECTION: Respiratory protection is not normally needed. If mists, vapors, or aerosols are generated, an approved respirator is recommended. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, and maintenance and inspection.

ENGINEERING CONTROLS: A system of local and/or general exhaust is recommended to keep employee exposures below irritating levels. Local exhaust ventilation is preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the latest edition of the ACGIH document *Industrial Ventilation, A Manual of Recommended Practices* for details.

WORK PRACTICES: An eye wash station and safety shower should be accessible in the immediate area of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

pH: 7.0-9.0

SPECIFIC GRAVITY: 1.11-1.17 g/mL

SOLUBILITY IN WATER: Miscible

BOILING POINT: Not available

MELTING POINT: Not available

VAPOR PRESSURE: Not available

VAPOR DENSITY (air=1): Not available

APPEARANCE AND ODOR: Hazy white liquid with a mild odor.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under ordinary conditions of use and storage.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Avoid incompatibles.

INCOMPATIBILITY: Furan-2-peroxycarboxylic acid. Contact with strong oxidizer (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions, and/or toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS: When magnesium chloride heptahydrate is heated to decomposition, it will emit corrosive hydrochloric acid vapor. When it is heated to temperatures above 572 °F (300 °C) it will emit toxic fumes of chlorine gas. Thermal decomposition or combustion of the polymer in this product may produce carbon monoxide, carbon dioxide, ammonia, and/or nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

ON INGREDIENTS:

Test Material	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Magnesium chloride, hexahydrate	8,100 mg/Kg	Not available	Not available
Emulsion polymer concentrate	>5,000 mg/Kg Estimated	>2,000 mg/Kg estimated	>20 mg/L-4H estimated

SECTION 12: ECOLOGICAL INFORMATION

Test Material	Aquatic Toxicity Data
Product	48 hr LC50 (Daphnia magna): 5,672 mg/L 96 hr LC50 (Pimephales promelas): 716.98 mg/L

DEGRADATION:

Test: CO₂ Evolution: Modified Sturm (OECD 301B):

The large polymer size is incompatible with transport across biological membranes and diffusion; the bioconcentration factor is therefore considered to be zero. The polymeric ingredient is not readily biodegradable.

Test: Seawater Shake Flask Method (OECD 306):

Duration: 28 day

Procedure: Biodegradability in seawater

Result: 13%

SECTION 13: DISPOSAL

RCRA STATUS: Discarded product, as sold, would not be considered a RCRA Hazardous Waste.

DISPOSAL: Dispose of in accordance with local, state and federal regulations.

SECTION 14: TRANSPORTATION**DOT CLASSIFICATION:**

ID Number: Not applicable

Proper Shipping Name: Not applicable

Class/Division: Not restricted

Packing Group: Not applicable

Label: None

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Status: Nonhazardous

TSCA: The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA: EPA Hazardous Substances (40 CFR 302):

Chemical Name

None

CERCLA Reportable Quantity (RQ)

SARA TITLE III (Sections 302, 311, 312, and 313):

Section 302 Extremely Hazardous Substances (40 CFR 355):

<u>Chemical Name</u>	<u>CAS#</u>	<u>RQ</u>	<u>TPQ</u>
None			

Section 311 and 312 Health and Physical Hazards:

<u>Immediate</u>	<u>Delayed</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactivity</u>
no	no	no	no	no

Section 313 Toxic Chemicals (40 CFR 372):

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Percent by Weight</u>
None		

SECTION 16: OTHER INFORMATION

HMIS RATINGS: Health = 1 Flammability = 0 Reactivity = 0

Hazard Rating Scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

The preceding information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change, and the conditions of handling and use or misuse are beyond our control, Kroff Chemical Company, Inc. makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein, and disclaims all liability for reliance thereon. User should satisfy himself that he has all current data relevant to his particular use.