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KR-C1630

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-C1630**
CHEMICAL DESCRIPTION: Quaternary Polyamine in water
PRODUCT CLASS: Water/Wastewater treatment
VERSION: 02-25-15

SECTION 2: INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL Z2	ACGIH TLV
Poyquaternaryamine (Epichlorohydrine- DMA copolymer)	42751-79-1	~50	Not established	Not established

SECTION 3: HAZARDS IDENTIFICATION

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

Clear amber liquid. Amine odor.

DANGER!

Prolonged or repeated contact with skin and eyes may result in mild irritation and redness of a short-term nature.

PRIMARY ROUTES OF ENTRY: Eye contact, skin contact, ingestion.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: None expected, but prolonged or repeated eye contact may result in mild irritation and redness of a short-term nature.

SKIN CONTACT: None expected, but prolonged or repeated skin contact may result in irritation of a short-term nature.

INGESTION: Effects of ingesting small amounts are negligible; ingesting large amounts may injure person slightly.

INHALATION: Not considered hazardous under normal conditions of use.

ACUTE: May result in mild irritation of a short-term nature for the skin and eyes.

CHRONIC: Prolonged or repeated skin exposure may cause dermatitis.

SECTION 4: FIRST AID MEASURES

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention if irritation should develop.

SKIN CONTACT: Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and footwear. Wash contaminated clothing before reuse. Get medical attention if irritation develops.

INGESTION: Do not induce vomiting. If vomiting should occur spontaneously, keep the airway clear. Get medical attention. Never give anything by mouth to an unconscious person.

INHALATION: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT: >100 C/>212 F

LOWER FLAMMABLE LIMIT: N/A

UPPER FLAMMABLE LIMIT: N/A

AUTO-IGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire. This material is not expected to burn unless heated to dryness. Water. Foam. Carbon dioxide. Dry chemical.

FIRE-FIGHTING INSTRUCTIONS: Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

FIRE & EXPLOSION HAZARDS: Cool exposed containers with water spray after extinguishing fire.

DECOMPOSITION PRODUCTS: Thermal decomposition (as may be experienced in a fire) may produce hydrogen chloride gas and/or may liberate oxides of nitrogen and carbon. Spills produce slippery surfaces and could present a physical hazard for firemen.

NFPA Codes: Health = 1

Flammability = 0

Reactivity = 0

Special Hazard = None

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

PROCEDURE FOR RELEASE OR SPILL: Area around spill should be diked immediately to prevent spreading. Avoid runoff into storm sewers and ditches that lead to waterways. Clean up spill immediately using inert absorbent materials such as clays, sand, earth or other commercially available dry sweeping compound. Product may cause slip hazard. If slippery conditions persist, apply additional dry sweeping compound. Following containment, large spills should be pumped into salvage tanks.

DISPOSAL METHOD: Large spills may plug sanitary sewers. Divert to pond and dry. Large quantities may require special waste authorizations. Large spills may be flushed to a sanitary sewer or, if contained, vacuumed up and taken to an approved waste treatment facility. Material will have a high BOD5 demand and may need to be discharged over an extended period of time to prevent surcharging or shock loading the wastewater treatment system. All disposal procedures should be reviewed with state and local regulatory agencies.

SECTION 7: HANDLING AND STORAGE

STORAGE: Store at temperature of 40°F to 110°F. Bacterial growth may occur with long-term storage.

ADVICE ON SAFE HANDLING:

Use proper precaution in unscrewing plug and/or opening container

Use only in well-ventilated areas

Wash thoroughly with soap and water after handling

Remove and wash any contaminated clothing

Avoid contact with skin, eyes and clothing

Ensure that eyewash stations and safety showers are close to the workstation location

Keep container closed when not in use.

TECHNICAL MEASURES/STORAGE CONDITIONS:

Keep container tightly closed when not in use

Store in a cool, dry place

Store at 5 - 30° C (41 - 86° F) in original closed containers

Avoid storage temperatures below freezing, since product may stratify

Changes in temperature create air pressure changes inside drums.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**PERSONAL PROTECTIVE EQUIPMENT:**

VENTILATION: Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

EYE PROTECTION: Chemical goggles or a face shield if splashing hazard exists.

RESPIRATORY PROTECTION: Under most conditions, use adequate general ventilation and protective equipment since volatility and toxicity are very low. If significant vapors, mists or

aerosols are present, use NIOSH approved respirator (ANSI Z882.1980) or equivalent that is equipped with a dust/mist cartridge.

SKIN PROTECTION: While there is a possibility of skin contact, rubber gloves and boots impervious to liquid material should be worn.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY: 1.12 – 1.16 g/mL

SOLUBILITY IN WATER: Complete

BOILING POINT: >100 C / 212 ° F

VAPOR PRESSURE: 58 mm Hg @ 38 ° C

VAPOR DENSITY (air=1): .60 mm Hg

APPEARANCE AND ODOR: Amber liquid and odorless.

MELTING/FREEZING POINT: -7 to 0 C / 19.4 to 32 F

VISCOSITY: 200 to 450 cP

pH: 5.5 – 6.5 (as-is)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.

INCOMPATIBILITIES: Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.

DECOMPOSITION PRODUCTS: Unknown.

SECTION 11: TOXICOLOGICAL INFORMATION

Chemical Name	Oral LD50 (rat)	Dermal LD50 (rat)	Inhalation LC50 (rat)
Product	>2000 mg/kg	>2000 mg/kg	No information

CHRONIC TOXICITY: NOEL / Oral / Rat / 90 days = 2000 mg/kg

MUTAGENICITY/GENOTOXICITY: This product was negative in the Ames Test. This product was negative in the mouse Micronucleus Test.

SECTION 12: ECOLOGICAL INFORMATION

Test	Aquatic Toxicity Data
Acute Fish Toxicity	Zebra Fish (danio rerio) LC50 (96 hour): >10 mg/L
Acute Crustaceans Toxicity	Water flea (Daphnia magna) EC50 (48 hour) >10 mg/L
Acute Algae Toxicity	No information available

Mobility: No information available

Persistence: No information available

Bioaccumulative potential: This product does not bio-accumulate.

Chemical Fate Information: No information available

Effects on Aquatic Organisms: The effects of this product on aquatic organisms are rapidly and significantly reduced with the presence of dissolved organic carbon in the aquatic environment.

Other Information: No other ecological studies have been carried out on this product

SECTION 13: DISPOSAL

RCRA STATUS: Non hazardous

DISPOSAL: Dispose of in accordance with local, state, and federal regulations. Prevent entry into sewers or waterways.

SECTION 14: TRANSPORTATION

DOT CLASSIFICATION: Not regulated.

Proper Shipping Name:

Primary Hazard Class/Division:

UN Number:

Packing Group:

Label:

SECTION 15: REGULATORY INFORMATION

This material is classified as non-hazardous. Spills of this material are not subject to any special reporting requirements under the Clean Water Act (CWA) or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It is recommended that local agencies be

contacted on any spill to determine if local or regional reporting requirements have been satisfied. This material is not subject to regulations promulgated under Sections 302, 304, 311, 312, and 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA, Title III).

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

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