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## KR-F5520

### 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-F5520  
SYNONYMS: None  
CHEMICAL FAMILY: Cationic Polyacrylamide  
VERSION: 2/02/12

#### SECTION 2: INFORMATION ON INGREDIENTS

Component	CAS Number (NJTS#)	Percent	OSHA PEL	ACGIH TLV
Aliphatic Hydrocarbon	(254504001-5164)	30-30%	Not established	Not established
Surfactant	(254504001-5466)	1-3%	Not established	Not established
Alcohols, C12 - C18 Ethoxylated >1<2.5 MOLE	68213-23-0	1-3%	Not established	Not established
Alcohols, C12 - C18 Ethoxylated >1<2.5 MOLE	68213-23-0	1.5-5%	Not established	Not established

#### SECTION 3: HAZARD IDENTIFICATION

##### \*\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*\*

Appearance: liquid, white

CAUTION! MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION.

PRIMARY ROUTES OF ENTRY: Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

TARGET ORGANS Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

**SYMPTOMS:** Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lack of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), Convulsions, coma

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:** Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**SKIN CONTACT:** Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage.

**INGESTION:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**INHALATION:** Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable.

**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:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**SKIN CONTACT:** Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

**INGESTION:** Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**INHALATION:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

NOTES TO PHYSICIAN: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

#### SECTION 5: FIRE FIGHTING MEASURES

FLASHPOINT: > 100 °C, (212°F)  
LOWER FLAMMABLE LIMIT: Not available  
UPPER FLAMMABLE LIMIT: Not available  
AUTOIGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Water spray, Dry chemical, Carbon dioxide (CO<sub>2</sub>)

FIRE-FIGHTING INSTRUCTIONS: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

HAZARDOUS COMBUSTION PRODUCTS: carbon dioxide and carbon monoxide, Hydrocarbons

NFPA Rating: Health: 1 Flammability: 1 Reactivity: 0 Unusual Hazards:

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

CAUTION! Spilled material becomes very slippery when wet. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

#### SECTION 7: HANDLING AND STORAGE

HANDLING: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

STORAGE: Store in a cool, dry, ventilated area.

#### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

SKIN PROTECTION: Wear resistant gloves (consult your safety equipment supplier). Discard gloves that show tears, pinholes, or signs of wear.

**RESPIRATORY PROTECTION:** A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**ENGINEERING CONTROLS:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance & Odor:** Opaque greenish to off white viscous liquid with slight hydrocarbon odor.

pH: 3.7 @ 10g/L

Specific gravity/Density (g/ml): -1.0

Solubility in Water: Soluble

Vapor Pressure (mm Hg): 35.00 hPa @ 68°F/ 20°C

Vapor Density (Air=1): No data

Volatile Organic Content: No data

%Volatiles by Weight: No data

Boiling point: -103°C / 217°F

Melting point: 5°F / -15°C

Freezing Point: No data

### SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Product is stable.

**HAZARDOUS POLYMERIZATION:** No hazardous polymerization will occur.

**CONDITIONS TO AVOID:** Heat, flames and sparks.

**INCOMPATIBILITIES:** Strong oxidizing agents

**DECOMPOSITION PRODUCTS:** carbon dioxide and carbon monoxide, Hydrocarbons

### SECTION 11: TOXICOLOGICAL INFORMATION

Test Material	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Aliphatic Hydrocarbon	>8,000 mg/Kg	>4,000 mg/Kg	4 hr. >2,500 mg/L
Surfactant	No data available	No data available	No data available
Alcohols, C12 – C18 Ethoxylated >1<2.5 MOLE	>2,000 mg/kg	No data available	No data available
Alcohols, C12 – C18 Ethoxylated >1<2.5 MOLE	>2,000 mg/kg	No data available	No data available

**California Prop. 65**

WARNING! This product contains a chemical known in the State of California to cause cancer. Acrylamide, lead, nickel, arsenic, Cadmium

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. lead, mercury, cadmium

**CADMIUM SECTION 12: ECOLOGICAL INFORMATION**

Test Material	Aquatic Toxicity Data
Product	LC50 96 hr. 11 mg/L for Fathead minnow
Product	EC50 48 hr. 1.75 mg/L for Ceriodaphnia dubia

**SECTION 13: DISPOSAL CONSIDERATIONS**

DISPOSAL: Consult state or local regulation for any additional handling, treatment, or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal, or recycling facility.

**SECTION 14: TRANSPORT INFORMATION**

DOT CLASSIFICATION: Not regulated by D.O.T.  
 Proper Shipping Name:  
 UN Number:  
 Packing Group:  
 Label:

**SECTION 15: REGULATORY INFORMATION**

OSHA Hazard Communication Status: Not a health hazard.  
 TSCA: The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA:  
 Reportable quantity of EPA hazardous substances in the product (40 CFR Part 302):

Chemical Name	CERCLA Reportable Quantity (RQ)

(Notify the EPA of spills exceeding this amount.)

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

Section 302 Extremely Hazardous Substances (40 CFR 355): Not applicable

Chemical Name	CAS#	RQ	TPQ
None			

Section 311 and 312 Health and Physical Hazards (40 CFR 370): Not applicable

Immediate	Delayed	Fire	Pressure	Reactivity
Yes	No	No	No	No

Section 313 Toxic Chemicals (40 CFR 372): Not applicable

Chemical Name	CAS#	Percent by Weight
none		

**SECTION 16: OTHER INFORMATION**

HMIS Rating:            Health: 1            Flammability: 1            Reactivity: 0

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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.