



## **MATERIAL SAFETY DATA SHEET**

**PART NUMBER TRADE NAME: KRS-5**

---

### **1. Physical & Chemical Characteristics**

**APPEARANCE AND ODOR: 779F, 415C N/A N/A 7.4 N/K NOT APPLICABLE**

**BOILING POINT: VERY L**

**MELTING POINT: LOW**

**VAPOR PRESSURE MM HG 70 F: N/K**

**SPECIFIC GRAVITY: N/K**

**EVAPORATION RATE AND REF: N/P**

**SOLUBILITY IN WATER: N/P**

**PERCENT VOLATILES BY VOLUME: K**

**VISCOSITY: N/K**

**PH: USE**

**RADIOACTIVITY: WATER, CARB**

**FORM RADIOACTIVE MATL: ON DIOXI**

**MAGNETISM MILLIGAUSS: DE, O**

**CORROSION RATE IPY: R FOAM.**

---

### **2. Fire and Explosion Hazard Data**

**EXTINGUISHING MEDIA: WEAR NIOSH/MSHA APPROVED POSITIVE PRESSURE SCBA AND FULL PROTECTIVE EQUIPMENT.**

**SPECIAL FIRE FIGHTING PROC:** NO A FIRE OR EXPLOSION HAZARD; HOWEVER, TOXIC FUMES MAY BE RELEASED IN A FIRE SITUATION.

**UNUSUAL FIRE AND EXPL HAZRDS:** YES at TEMPERATURES ABOVE 392C.

---

### 3. Reactivity Data

**COND TO AVOID STABILITY:** NONE EXPECTED.

**MATERIALS TO AVOID:** WILL VAPORIZE AT TEMPERATURES FROM ABOUT 500-600C EVOLVING THALLIUM IODIDE AND THALLIUM

**HAZARDOUS DECOMP PRODUCTS:** OXIDE. NO NOT RELEVANT.

**CONDITIONS TO AVOID POLY:** YES: MAY CAUSE IRRITATION.

---

### 4. Health Hazard Data

**LD50 LC50 MIXTURE:** IRRITATION AND ALLERGIC REACTION. INHA

**HEALTH HAZ ACUTE AND CHRONIC:** ED OR EXCESSIVE EXPOSURE MAY RESULT IN THALLIUM POISONING THAT AFFECTS PRIMARILY THE NERV SYS & BODY HAIR. EARLY SYMPS ARE FATIGUE, LIMB PAIN, METALLIC TASTE IN MOUTH, & LOSS OF HAIR. DELAYED SYMPS ARE INFLAMM OF (EFTS OF OVEREXP) NO NO NOT RELEVANT.

**EXPLANATION CARCINOGENICITY:** HLTH HAZ:PERIPHERAL NERVES, PROTEIN IN URINE & JOINT PAIN. INGEST:SAME AS INHALATION. TH

**SIGNS SYMPTOMS OF OVEREXP:** ALLIUM IODIDE/BROMIDE:DUE TO FORMED NATURE OF PROD, NO AIRBORNE CONCENTRATIONS ARE EXPECTED. MAY CAUSE EYE/SKIN IRRITATION & ALLERGIC SKIN REACTIONS. HARMFUL IF INHALED/SWALLOWED. MAY AGGRAVATE EXISTING RESPIRATORY AND/OR SKIN AILMENTS.

**MED COND AGGRAVATED BY EXP:** EYE:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES TO REMOVE PARTICLES. CALL MD IF IRRITATION DEVELOPS.

**EMERGENCY FIRST AID PROC:.** SKIN: WASH WITH SOAP AND WATER. INHAL:NORMALLY NOT NEEDED. IF EXPOSED TO EXCESSIVE LEVELS OF DUST OR FUMES, REMOVE TO FRESH AIR AND GET MD. INGEST:NORMALLY NOT NEEDED. IF LARGE QUANTITIES ARE INGESTED, GET MD. IF BROKEN OR NOT USEABLE, SCOOP UP OR VACUUM INTO A CONTAINER FOR DISPOSAL. IT IS REC TH

---

## 5. Precautions for Safe Handling and Use

**STEPS IF MATL RELEASED SPILL:** EACH USER ESTABLISHES A SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN (SPCC). SUCH PLAN SHOULD INCL PROC APPLIC TO PROPER STOR, CNTRL & CLEAN-UP (SUPP DATA) NONE SPECIFIED BY MANUFACTURER. FEDERAL, STATE & LOC DISP LAWS & REGS WILL DETERMINE PROPER WASTE DISP PROC. ALL WASTE M

**WASTE DISPOSAL METHOD:** ATLS SHOULD BE REVIEWED TO DETERMINE APPLIC HAZS (TESTING MAY BE NECESSARY). DISP REQS ARE DEPENDANT ON HAZ CLASSIFICATION & WILL VARIES BY LOCATION & TYPE (SUPDAT)WASH THOROUGHLY AFTER HANDLING. KEEP AWAY FROM FOOD AND FEED PRODUCTS. KEEP CONTAINER CL

**PRECAUTIONS HANDLING STORING:** OSED. NONE SPECIFIED BY MANUFACTURER.

**OTHER PRECAUTIONS:** NIOSH/MSHA APPROVED RESPIRATOR AS NECESSARY.

---

## 6. Control Measures

**RESPIRATORY PROTECTION:** GENERAL; LOCAL EXHAUST VENTILATION IS NECESSARY TO CONTROL DUST.

**VENTILATION:** RUBBER OR NEOPRENE GLOVES. CHEMICAL WORKERS GOGGLES (FP N). NONE SPE

**PROTECTIVE GLOVES:** CIFIED BY MANUFACTURER.

**OTHER PROTECTIVE EQUIPMENT:** AVOID BREATHING DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

**WORK HYGIENIC PRACTICES:** SPILL PROC:OF SPILLS, INCLUDING REUSE OR DISPOSAL AS APPROPRIATE. WASTE DISP METH:OF DIS

**SUPPL SAFETY HEALTH DATA:** POSAL SELECTED. SOME WASTE MATERIALS ARE AMENABLE TO RECYLCLE/REUSE. N 91325ZZZ NOT REGULATED BY THIS MODE OF TRANSPORTATION

---

## 7. Label Data

**TECHNICAL REVIEW DATE:** YES

**LABEL DATE:** WARNING

**COMMON NAME:** ACUTE: HARMFUL IF INHALED IN EXCESSIVE AMOUNTS.

**SPECIAL HAZARD PRECAUTIONS:** VENTILATION. MAY CAUSE EYE AND SKIN IRRITATION. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING. CHRONIC:TARGET ORGANS:PROLONGED OR EXCESSIVE EXPOSURE MAY RESULT IN THALLIUM POISONING THAT AFFECTS PRIMARILY THE NERVOUS SYSTEM AND BODY HAIR.MAY CAUSE ALLERGIC SKIN REACTION. DELAYED SYMPTOMS ARE PERIPHERAL NERVE INFLAMMATION, PROTEIN IN THE URINE, AND JOINT PAIN.

**SPECIAL HAZARD PRECAUTIONS:** VENTILATION. MAY CAUSE EYE AND SKIN IRRITATION. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING. CHRONIC:TARGET ORGANS:PROLONGED OR EXCESSIVE EXPOSURE MAY RESULT IN THALLIUM POISONING THAT AFFECTS PRIMARILY THE NERVOUS SYSTEM AND BODY HAIR.MAY CAUSE ALLERGIC SKIN REACTION. DELAYED SYMPTOMS ARE PERIPHERAL NERVE INFLAMMATION, PROTEIN IN THE URINE, AND JOINT PAIN.