

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-3; Flammability-2; Reactivity-0; Special COR Manufactured For: K&K CHEMICAL CO. Address: 1303 Industrial Drive Royse City, TX 75189 Business Phone: (800)958-6921 EMERGENCY CONTACT 924 HR): CHEMTREC 1-800-424-9300	HMIS Rating: Health-3; Flammability-2; Reactivity-0; Personal Protection-C,D GROUND DOMESTIC DOT: Consumer Commodity, ORM-D (pints only) ALL OTHER SHIPMENTS DOT Hazard Classification: Corrosive Liquid, Flammable N.O.S., 8 UN2920, PG II (sulfuric acid, chlorotoluene), Corrosive/Flammable label Identity (trade name as used on label): RAM-OUT II, K-725
Date Prepared: 9/10/01 Prepared By: JAM	MSDS Number: R992 Revision: 1
Information Calls: (800)327-0646	NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA
EMERGENCY RESPONSE NUMBER: 1(800)424-9300	

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
SULFURIC ACID	7664-93-9	Yes	1mg/M3	1mg/M3	d
PETROLEUM DISTILLATE	68551-19-9	No	N/E	N/E	d
MONOCHLOROTOLUENE (less than 1%)	25168-05-2	Deminis	50	50	d

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 320°F	Specific Gravity: (H2O=1): 1.73
Vapor Pressure: N/A	Vapor Pressure: (Non-Aerosols)(mm Hg and Temperature): ND
Vapor Density: (Air = 1): Greater than 1	Evaporation Rate: (= 1): ND
Solubility in Water: Upper layer is negligible; lower layer is completely	Water Reactive: Violently
Appearance and Odor: Clear upper layer with solvent odor; dark bottom layer with no odor to mild acid odor	

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols): N/A	Auto Ignition Temperature: N/A	Flammability Limits in Air by % in Volume: % LEL: N/A % UEL: N/A
FLASH POINT AND METHOD USED (non-aerosols): 123°F (TCC) upper layer EXTINGUISHING MEDIA: CO2 or dry chemical. Use water fog to knock down vapors.	SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH / MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire. DO NOT allow water to enter containers. Violent reaction results.	
Unusual Fire & Explosion Hazards: Solutions in contact with metals form hydrogen.		

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY <input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE	HAZARDOUS POLYMERIZATION <input type="checkbox"/> WILL <input checked="" type="checkbox"/> WILL NOT OCCUR
Incompatibility (Mat. to a void): Oxidizers, reducing agents, other combustible materials, organic materials, alkalis, powdered metals, amines, carbides, fulminates chlorates, nitrates, picrates.	Conditions to Avoid: Heating. Water on sulfuric acid will cause splattering, fuming and evolution of heat.
Hazardous Decomposition Products: Oxides of sulfur. Hydrogen may be evolved in contact with metal.	

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: <input type="checkbox"/> INHALATION <input type="checkbox"/> INGESTION <input checked="" type="checkbox"/> SKIN ABSORPTION <input checked="" type="checkbox"/> EYE <input type="checkbox"/> NOT HAZARDOUS	
ACUTE EFFECTS: Burns, rapid destruction of all tissue contacted.	
Inhalation: May cause respiratory irritation. Liquid is corrosive.	
Eye Contact: Corrosive.	Skin Contact: Corrosive.
Ingestion: Corrosive.	
CHRONIC EFFECTS: (Effects due to excessive exposure to the raw materials of this mixture) Dermatitis or secondary effects of burns, chronic over-exposure may cause tooth erosion, chronic cough.	
Medical Conditions Generally Aggravated by Exposure: N/A	

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention.
Skin Contact: Flush with water for 15 minutes. Seek medical attention.
Inhalation: Remove victim to fresh air. Get medical attention.
Ingestion: DO NOT INDUCE VOMITING. Drink large volumes of water. Get immediate medical attention.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type): Not needed in normal use and handling of product.	
Protective Gloves: Rubber	Eye Protection: Chemical goggles and faceshield.
Ventilation Requirements: Normal room ventilation is usually adequate. As required to keep air concentration below PEL.	
Other Protective Clothing & Equipment: Coveralls, rubber apron and boots. Eyewash station and safety shower.	
Hygienic Work Practices: Avoid contact with liquid & breathing of mists or vapors. Upon contact with eyes or skin, wash off with water immediately.	

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released: Dike spill & soak up with inert absorbent. Shovel or sweep & place in properly labeled approved DOT container & seal for disposal in authorized legal manner. Neutralize area with soda ash & dispose of material properly.
Waste Disposal Methods: Dispose of material according to local, state or federal regulations.
Precautions To Be Taken In Handling & Storage: Store in original shipping containers. Keep closed when not in use. Follow label directions when using. Shelf life one year.
Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind

** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only

TECHNICAL DATA SHEET

Product Name: RAM-OUT II

Item No.: K-725

Description: This product combines concentrated virgin sulfuric acid with an odor blanket to reduce exposure to undesirable odors. The blanket floats on top to "trap" odors in the drain. It is ideal for use in occupied buildings or in other areas where odor reduction is desired. A very powerful organic dissolver and dehydrating agent, this single application product will dissolve and liquefy rags, hair, paper, grease, wood fibers, resins, tobacco, tea bags and other organic obstructions, quickly clearing plugged drains.

Directions: When using this product, PROTECT FACE (especially eyes) by using full face shield or cup-type chemical goggles, AND OTHER PORTIONS OF BODY by using rubber gloves, rubber boots and rubber apron. Use with adequate ventilation. To open, set bottle on flat surface. DO NOT SQUEEZE ON SIDES. Remove cap by following directions on cap and never use any tool to remove cap. Do not drop. Always replace cap after use. Prior to product use, place plastic catch/pail under drain pipe to avoid damage to floors as leaks may appear in worn drain pipes after the interior is cleaned. Removal of standing water is not necessary. After SLOWLY pouring acid into drain, IMMEDIATELY place inverted dish pan, bucket or other deep container over drain opening to protect against possible eruption of drain contents and acid. Do not stand over or look into the drain while using this product. NEVER use a plunger while using this chemical. Use COLD WATER ONLY to flush after treatment. Repeat as necessary to maintain free-flowing drains. Do NOT use on aluminum. If the drain has a strainer, remove it if possible prior to use of this product. Do not allow this product to remain for more than a few minutes in contact with stainless steel or chrome, since discoloration is possible. Heat generated by this product may deform plastic (PVC) pipes. Do NOT allow this product or its dilutions to contact surfaces of bathtubs and sinks. Do not attempt to supplement action of this product with air, gas or water pressure. Do not enter line after applying this product. Do not attempt to use mechanical drain line openers after this product has been added.

POISON! THIS IS CONCENTRATED SULFURIC ACID! READ ALL DIRECTIONS CAREFULLY BEFORE USING PRODUCT Avoid contact with skin, eyes and clothing. Follow protective measure specified under DIRECTIONS. THIS PRODUCT MAY ERUPT VIOLENTLY FROM DRAIN, spewing hot acid and contents of drain onto persons in vicinity causing severe burns, if poured into drain containing alkaline drain openers and/or hot water. Do NOT use before or after other chemical drain openers or any other chemicals. Do NOT use in drains containing a build-up of plaster waste material. A toxic gas may be released. Use from this bottle only and do NOT transfer contents into any other container. NEVER add water to contents while in container because of violent reaction. Do NOT attempt to disassemble plumbing or remove clean-out plug(s) from lines containing this product. When flushing drain lines, use cold water; never use hot water. Never use a plunger when product is in drain lines. Keep container tightly closed when not in use. Do NOT allow to contact porcelain, enamel, aluminum or chrome. Do NOT use in garbage disposals. NOT recommended for toilet bowls. Do not mix with other household chemicals. Never leave unneutralized or unflushed sulfuric acid in pipe where unsuspecting persons may come in contact with product. Also contains monochlorotoluene. Combustible. Use only in a well ventilated area. Do not use near heat, sparks, open flame or other sources of ignition. Do not smoke in use area. KEEP OUT OF REACH OF CHILDREN. **FIRST AID PROCEDURES:** **SKIN CONTACT:** Flush immediately with water for 15 minutes. Call physician immediately. **EYE CONTACT:** Flush immediately with water for 15 minutes. Call physician immediately. **INGESTION:** Do not induce vomiting. Drink large volumes of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call physician immediately.

Container Disposal: When container is completely empty, triple rinse with COLD WATER ONLY before discarding to prevent accidental burns. Puncture container and discard according to local regulations.

Product Specifications:

Classification:	Sulfuric Acid Drain Opener	Color:	Top layer colorless; Bottom layer dark
Odor:	Chlorotoluene		
Flash Point:	123 F TCC	Lb./gal.:	1.7

CAS NUMBERS: Sulfuric Acid 7664-93-9; Water 7732-18-5; Petroleum Distillate 68551-19-9; Monochlorotoluene 25168-05-2

HMIS RATING: Health-3; Flammability-2; Reactivity-1; Personal Protection-C,D.