



MATERIAL SAFETY DATA SHEETS

PRODUCT IDENTIFICATION

PRODUCT NAME: MULTI-KLEEN
PART #: MK1GNC

(HMIS RATINGS)
HEALTH: 3
FIRE: 0
REACTIVITY: 1

PRODUCT INFORMATION (800) 262-0012	MEDICAL EMERGENCY (856) 455-4555
TRANSPORTATION EMERGENCY CHEMTREC (800) 424-9300	DISTRIBUTOR / MANUFACTURER NATIONAL REFRIGERANTS, INC. 661 KENYON AVE. ROSENHAYN, NJ

HAZARDOUS INGREDIENTS

	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>% of Range</u>
POTASSIUM HYDROXIDE 45%	1310-58-3	NE	2MG/M3	<20
SODIUM METASILICATE	6834-92-0	NE	NE	<10
SODIUM XYLENE SULFONATE	1300-72-7	NE	NE	<10
TALL OIL FATTY ACID	61790-12-3	NE	NE	<10
SURFACTANT	68439-46-3	NE	NE	<10

HAZARDS IDENTIFICATIONS

ROUTE (S) OF ENTRY: EYES YES SKIN YES INGESTION YES INHALATION YES

EFFECTS OF OVER EXPOSURE: VERY CORROSIVE TO SKIN, EYES & MUCOUS MEMBRANES; CAUSES DEEP IMMEDIATE BURNS, MAY CAUSE BLINDNESS.

INHALATION: IRRITATION OF NASAL PASSAGES.

EYES: CORROSIVE TO EYES/BLINDNESS MAY OCCUR.

INGESTION: NAUSEA, CORROSIVE TO DIGESTIVE TRACT.

CARCINOGENITY: NO

NTP? NOT LISTED IARC ? NOT LISTED

OSHA REGULATED? SEE HAZARDOUS INGREDIENTS FOR EXPOSURE.

FIRST AID MEASURES

INHALATION:	Move to fresh air. IF BREATHING STOPS, START ARTIFICIAL RESPIRATION, GET MEDICAL IMMEDIATE ATTENTION.
EYE CONTACT:	Wash with plenty of water for 15 min. GET IMMEDIATE MEDICAL ATTENTION.
SKIN CONTACT:	Neutralize with very dilute vinegar solution, wash with soap and water, apply skin cream. For large burns - GET IMMEDIATE MEDICAL ATTENTION
INGESTION:	Drink water. DO NOT induce vomiting. SEEK IMMEDIATE MEDICAL ATTENTION. NOTE: VOMITTING MAY CAUSE ASPIRATION OF MATERIAL TO LUNGS CAUSING PULMONARY EDEMA.

FIRE FIGHTING MEASURES

FLAMMABILITY as per CPSC FLAME EXTENTION TEST: FLASH POINT: NOT COMBUSTIBLE
UNUSUAL FIRE & EXPLOSION HAZARDS: AVOID MIXING WITH ACIDS AND SOFT METALS.



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ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:

PICKUP WITH ABSORBENT MATERIAL, PLACE IN LEAK PROOF CONTAINERS FOR PROPER DISPOSAL.

HANDLING AND STORAGE

KEEP CONTAINER CLOSED WHEN NOT IN USE.

EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION REQUIREMENTS: IF VAPORS ARE DETECTED, VENTILATE WORK AREA USING EXHAUST FANS. MAKE SURE VAPORS ARE VENTED AWAY FROM WORKERS.

PERSONAL PROTECTION:

RESPIRATORY: KEEP FACE AWAY FROM SPRAY MIST. DO NOT BREATHE VAPORS.

EYE: USE TIGHT FITTING, SPLASH PROOF SAFETY GOGGLES. CONTACT LENSES SHOULD NOT BE WORN WHEN HANDLING THIS MATERIAL.

SKIN: WEAR IMPERVIOUS CLOTHING AND FOOTWEAR TO PREVENT ALL SKIN CONTACT. USE OF FACESHIELD IS RECOMMENDED.

GLOVES: CHEMICAL RESISTANT RUBBER/NEOPRENE.

OTHER: AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. WASH HANDS THOROUGHLY AFTER HANDLING.

PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (mm Hg): 12.4

VAPOR DENSITY (AIR=1): 0.4

SPECIFIC GRAVITY (H₂O =1): 1.12

EVAPORATION RATE (H₂O=1): 1.0

SOLUBILITY IN WATER: COMPLETE

MELTING POINT: NA

Ph: 12-14.0 @ 20 deg. C

BOILING POINT: 212 deg. F

APPEARANCE AND ODOR: CLEAR YELLOW LIQUID, TALL OIL ODOR

STABILITY AND REACTIVITY

STABILITY: STABLE

MATERIALS TO AVOID: ACIDS AND ACID PRODUCTS.

HAZARDOUS DECOMPOSITION PRODUCTS: HEAT

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.



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TRANSPORTATION INFORMATION

DOT: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS POTASSIUM HYDROXIDE)
8, UN3266, PGIII

NOTE: If this product is shipped with inner packaging's not over 1 gallon, within a package that does not exceed 66 pounds total, this product may be reclassified as ORM-D.

REGULATORY INFORMATION

- 302 (EXTREMELY HAZARDOUS SUBSTANCES):** REPORTING NOT REQUIRED
- 304/CERCLA (SPILLS NOTIFICATION):** REPORTING REQUIRED FOR SPILLS ABOVE THE RQ. POTASSIUM HYDROXIDE IS LISTED BY CERCLA. SPILLS IN EXCESS OF 1000 LBS. EACH MUST BE REPORTED.
- 311 (COMMUNITY RIGHT-TO-KNOW):** REPORTING REQUIRED, ACUTE AND CHRONIC HEALTH HAZARD, CORROSIVE, TOXIC.
- 312 (RTK INVENTORY DATA):** REPORTING REQUIRED FOR INVENTORIES ABOVE TPQ.
- 313 (EMISSION AND RELEASES):** REPORTING NOT REQUIRED.

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DATE OF LATEST REVISION/REVIEW: 10/09
PERSON RESPONSIBLE FOR MSDS: Ray Madariaga