



# MATERIAL SAFETY DATA SHEET

## PRODUCT IDENTIFICATION

**PRODUCT NAME: KLEEN COIL**  
**PART #: KN1GN, KN2GN, KN55GN**

(NFPA RATINGS)  
HEALTH: 1  
FIRE: 0  
REACTIVITY: 0  
HMIS PROTECTIVE EQUIPMENT: X See your supervisor

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

## HAZARDOUS INGREDIENTS

**OSHA HAZARDOUS COMPONENTS (29CFR 1910.1200)**      **EXPOSURE LIMITS: 8 HR. TWA**

	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	25 PPM (SKIN)	25 PPM (SKIN)
DODECYLBENZENE SULFONIC ACID	27176-87-0	NE	NE

## HAZARDS IDENTIFICATIONS

**EMERGENCY OVERVIEW:** WARNING! EYE AND SKIN IRRITANT. HARMFUL IF INHALED OR SWALLOWED.

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:** INHALATION OF VAPORS IN HIGH CONCENTRATION MAY CAUSE HEADACHE, NAUSEA, VOMITING.

**EYE CONTACT:** IRRITATION DEVELOPS IMMEDIATELY ON CONTACT.

**SKIN CONTACT:** IRRITATION DEVELOPS ON CONTACT.

**INGESTION:** TOXIC. HARMFUL IF SWALLOWED. MAY CAUSE HEADACHE, NAUSEA, VOMITING.

**CHRONIC EFFECTS:** NOT ESTABLISHED.

**CARCINOGENITY:** LISTED IN NTP? NO      IARC ? NO      OSHA REGULATED? NO

## FIRST AID MEASURES

<b>INHALATION:</b>	Remove victim to fresh air and if needed, immediately begin artificial respiration. Give oxygen if breathing is labored. Get emergency medical help. Contact a physician immediately.
<b>EYE CONTACT:</b>	Flush eyes with water for 15 minutes. Get medical attention if symptoms develop and persist.
<b>SKIN CONTACT:</b>	Flush with water or soap and water for 15 minutes or until all traces have been removed. Seek medical attention if symptoms develop and persist.
<b>INGESTION:</b>	DO NOT INDUCE VOMITING. Rinse mouth out with water. Get immediate medical attention.



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## FIRE FIGHTING MEASURES

**FLASH POINT (F):** NONE FLAMMABLE - AQUEOUS SOLUTION.

**FLAMMABILITY LIMIT:** LOWER N/A                      UPPER N/A

**AUTOIGNITION TEMPERATURE:** NE

**GENERAL HAZARD:**

**FIRE FIGHTING INSTRUCTIONS:** APPROACH FIRE FROM UPWIND SIDE. AVOID BREATHING SMOKE, FUMES, MIST, OR VAPORS ON THE DOWNWIND SIDE. FIREFIGHTERS WEAR PROTECTIVE CLOTHING AND SELF-CONTAINED BREATHING APPARATUS.

**EXTINGUISHING MEDIA:** DRY POWDER, CARBON DIOXIDE (CO<sub>2</sub>), WATER FOG OR SPRAY.

**HAZARDOUS COMBUSTION PRODUCTS:** ACRID SMOKE, IRRITATING AND TOXIC FUMES OF SO<sub>x</sub> H<sub>2</sub>S, PO<sub>x</sub>.

## ACCIDENTAL RELEASE MEASURES

**LAND SPILL:**

**SMALL SPILLS:** FLUSH TO SEWER WITH LARGE AMOUNTS OF WATER, AT LEAST 10 PARTS WATER TO 1 PART PRODUCT.

**LARGE SPILLS:** PICK UP WITH ABSORBENT MEDIA, PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL OR REUSE.

**WATER SPILL:** NOTIFY PROPER AUTHORITIES.

CLEAN UP LEAKS/SPILLS IMMEDIATELY TO PREVENT SOIL OR WATER CONTAMINATION.

## HANDLING AND STORAGE

**HANDLING:** AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. AFTER HANDLING THIS PRODUCT, WASH HANDS BEFORE EATING, DRINKING OR SMOKING. IF CONTACT OCCURS, REMOVE CONTAMINATED CLOTHING. IF NEEDED, TAKE FIRST AID ACTION SHOWN ABOVE. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.

**STORAGE:** STORE AWAY FROM FOOD STUFFS.

## EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** LOCAL EXHAUST VENTILATION.

**PERSONAL PROTECTION:** RESPIRATORY PROTECTION NOT NORMALLY NEEDED UNDER NORMAL CONDITIONS OF USE. USE RUBBER OR LATEX GLOVES, CHEMICAL GOGGLES OR FULL FACE SHIELD. USE BOOTS, APRONS DRENCH SHOWERS, EYE WASH AS NEEDED FOR PROTECTION AGAINST SPILLS AND/OR SPLASHES.

## PHYSICAL AND CHEMICAL PROPERTIES

**VAPOR PRESSURE:** ND

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 1.02

**SOLUBILITY IN WATER:** COMPLETE

**Ph** 11-12

**BOILING POINT:** 212 DEG. F

**APPEARANCE AND ODOR:** GREEN LIQUID.

**VAPOR DENSITY (AIR=1):** ND

**EVAPORATION RATE (BuAc=1):** <1

**VOC (G/L):**

**FREEZING POINT:** ND



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## STABILITY AND REACTIVITY

**STABILITY:** STABLE

**CONDITIONS TO AVOID:** HIGH TEMPERATURES

**MATERIALS TO AVOID:** OXIDIZERS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** SO<sub>x</sub>, H<sub>2</sub>S, PO<sub>x</sub> AND FROM COMBUSTION-SMOKE AND TOXIC FUMES.

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

## TOXICOLOGICAL INFORMATION

ETHYLENE GLYCOL MONOBUTYL ETHER	TDL <sub>o</sub> : 600 mg/kg (oral-wmn)
	TCL <sub>o</sub> : 195 ppm/8hr (inh-human) GIT
	TCL <sub>o</sub> : 100 ppm (inh-human) NOSE, EYE, CNS
	LD <sub>50</sub> : 470 mg/kg (oral-rat)
	LC <sub>50</sub> : 2900 mg/m <sup>3</sup> (inh-rat)
DODECYL BENZENE SULFONIC ACID	LD <sub>50</sub> : 50-500 mg/kg (oral-mouse)

## ECOLOGICAL INFORMATION

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.

ETHYLENE GLYCOL MONOBUTYL ETHER 1000 ppm / 24 hr / brine shrimp / TLm

DODECYL BENZENE SULFONIC ACID 5-15 ppm / guppy / lethal conc.

## DISPOSAL CONSIDERATIONS

DISPOSE AS A HAZARDOUS WASTE. PROPER CLASSIFICATION AND DOCUMENTATION IS REQUIRED BEFORE DISPOSAL. FOLLOW ALL FEDERAL, STATE AND LOCAL REGULATIONS.

## TRANSPORTATION INFORMATION

**DOMESTIC--OTHER THAN AIR (DOT)**

PROPER SHIPPING NAME: NON-REGULATED MATERIAL

## REGULATORY INFORMATION

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT):** THE REPORTABLE QUANTITY IS 1000 LBS. (DODECYL BENZENE SULFONIC ACID). CONTACT LOCAL AUTHORITIES FOR OTHER REPORTING REQUIREMENTS.

**SARA TITLE III (SUPERFUND AMENDMENTS REAUTHORIZATION ACT):** NOT LISTED

**CALIFORNIA PROPOSITION 65:** NOT LISTED.

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# **MATERIAL SAFETY DATA SHEET**

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**DATE OF LATEST REVISION/REVIEW:**  
**PERSON RESPONSIBLE FOR MSDS:**

12/2012  
Matt Callahan