



MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: KLEEN FOAM
PART #: KF1GN, KF2GN

(NFPA RATINGS)

HEALTH: 3
FIRE: 0
REACTIVITY: 1

HMS PROTECTIVE EQUIPMENT: X See your supervisor

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

OSHA Hazardous Components (29 CFR 1910.1200)

Sodium Hydroxide (CAS# 1310-73-2)
Tetrasodium EDTA (CAS# 64-02-8)
Potassium silicate (CAS# 1312-76-1)
Alkyl Polyglycoside (CAS# 68515-73-1)

EXPOSURE LIMITS:

OSHA PEL	ACGIH TLV
CL 2 mg/m ³	CL 2 mg/m ³
Not established	Not established
Not established	Not established
ND	ND

HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW: POISON! DANGER! CORROSIVE to all body tissues. Avoid contact with skin or eyes. Harmful if inhaled or swallowed.

POTENTIAL HEALTH EFFECTS:

INHALATION: Inhalation of vapor or mist is corrosive to respiratory tract.
EYE CONTACT: Liquid or vapors are corrosive to eyes.
SKIN CONTACT: Liquid or vapors are corrosive to skin.
INGESTION: Toxic. May cause severe damage, perforation, and scarring of gastrointestinal tract.
CHRONIC Effects: Chemical pneumonitis.

NOTE:

CARCINOGENICITY: LISTED IN NTP? No IARC? No OSHA Regulated? No

FIRST AID MEASURES

INHALATION:	Remove victims to fresh air and, if needed, immediately begin artificial respiration. Give oxygen if breathing is labored. Get emergency medical help. Contact a physician immediately.
EYE CONTACT:	Flush eyes with water for 15 minutes. Get medical attention if symptoms develop and persist.
SKIN CONTACT:	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.
INGESTION:	DO NOT INDUCE VOMITING, get immediate medical attention.



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FIRE FIGHTING MEASURES

FLASHPOINT (TEST METHOD): None
FLAMMABLE LIMITS: LOWER: NA UPPER: NA
AUTOIGNITION TEMPERATURE: NA
GENERAL HAZARD: Toxic fumes of Na₂O, SO_x
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 (CO₂), water fog or spray.
HAZARDOUS COMBUSTION PRODUCTS: Smoke, toxic fumes of Na₂O, CO, CO₂, SO_x.

ACCIDENTAL RELEASE MEASURES

LAND SPILL: Flush to sewer with large amounts of water, at least 10 parts water to 1 part cleaner. **LARGE SPILLS:** Pick up with absorbent media, vacuum truck or pump. Place in non-leaking containers for proper disposal or salvage. Notify proper local, state and federal authorities.
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 in section IV. Launder contaminated clothing before reuse.
STORAGE: Store away from strong acid, acidic materials.

EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust recommended.
PERSONAL PROTECTION: Wear chemical impervious gloves and full-face shield. Use boots, aprons, drench showers, eyewash as needed for protection against spills and/or splashes.

PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: 13 mmHg at 70 F
SPECIFIC GRAVITY: 1.25 g/ml
SOLUBILITY IN WATER: Complete
pH: 13.91
BOILING POINT: 228.9 F
APPEARANCE & ODOR: Pink liquid, pungent odor
VAPOR DENSITY (Air=1): ND
EVAPORATION RATE (N-BUTYL ACETATE=1): <1
VOC (G/L): ND
FREEZING POINT: ND

STABILITY AND REACTIVITY

STABILITY: Stable.
CONDITIONS TO AVOID: High temperatures.
MATERIALS TO AVOID: Strong acids, acidic materials.
HAZARDOUS DECOMPOSITION PRODUCTS: From combustion: smoke, carbon monoxide, carbon dioxide, oxides of sulfur, Na₂O.
HAZARDOUS POLYMERIZATION: Will not occur.



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TOXICOLOGICAL INFORMATION

Sodium hydroxide	LDLo: 500 mg/kg		(oral - rat)
	50 g/24 hr	SEV	(eye - rabbit)
	500 mg/24 hr	SEV	(skin - rabbit)
Surfactant	LDLo: 15mg/kg/3D-1		(oral-rat)
	LD50: 2590ml/kg		(oral-rat) / 2830ml/kg (skin-rabbit)

ECOLOGICAL INFORMATION

No Data.

DISPOSAL CONSIDERATIONS

Dispose as hazardous waste. Classification and documentation is required before disposal. Follow all local, state and federal regulations.

TRANSPORTATION INFORMATION

IDENTIFICATION NUMBER: UN 1824
PROPER SHIPPING NAME: Sodium hydroxide solution
HAZARD CLASS: 8
DOT Emergency Guide #: 154
Reportable Quantity (RQ): Not applicable
International: Sodium hydroxide solution, 8, UN 1824, PG II

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 pounds (sodium hydroxide). Contact local authorities for other reporting requirements.
SARA TITLE III (Superfund Amendments and Reauthorization Act): No components are listed.
CALIFORNIA PROPOSITION 65: Not listed.

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DATE OF LATEST REVISION/REVIEW: 12/2012
PERSON RESPONSIBLE FOR MSDS: Matt Callahan