

Safety Data Sheet

BREW KLEEN LF

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME BREW KLEEN LF
SYNOMYS Product is a mixture: No synonyms are available
PRODUCT USE Highly Alkaline Material
SUPPLIER WESMAR CO. INC.
SUPPLIER'S ADDRESS 5720 204TH ST. SW, LYNNWOOD, WA 98036
EMERGENCY RESPONSE PHONE (206) 783-5344
EMERGENCY RESPONSE PHONE PERS: 1-800-633-8253



SECTION 2 – HAZARD IDENTIFICATION

GHS – US CLASSIFICATION	:	H290 Metal corrosion Category 1 H302 Harmful if swallowed H314 Skin Corrosion Category 1A H318 Serious Eye Damage Category 1
HAZARD PICTOGRAMS	:	 
SIGNAL WORD	:	DANGER
GHS LABEL ELEMENTS	:	The product is classified and labeled according to the Globally Harmonized System (GHS).
GHS PHYSICAL HAZARDS	:	H290 May be corrosive to metals.
GHS HEALTH HAZARDS	:	H302 Harmful if swallowed H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H370 Causes damage to respiratory system by inhalation.
GHS PRECAUTIONARY HAZARDS	:	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P264 Wash skin and contaminated clothing thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P280 Wear suitable protective gloves / protective clothing / eye protection / face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303+P361 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P353 P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P338 P305+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position. P310 Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth if ingested. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
CLASSIFICATION SYSTEM:	:	NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.

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NFPA ratings (scale 0-4): : Health = 3, Fire = 0, Reactivity = 1

HMIS ratings (scale 0-5): : Health = 3, Fire = 0, Reactivity = 1

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION	:	Mixtures		
DESCRIPTION	:	Mixture of the substances listed below with nonhazardous additions.		
COMPONENT	PERCENT	CAS #	EC #	GHS CLASS
Sodium Hydroxide	25-45	1310-73-2	215-185-5	Metal Corrosion Category 1, Skin Corrosion Category 1A, Eye Damage Category 1, Aquatic Acute Category 3
Aminotrimethylene Phosphonic Acid	< 1	6419-19-8	229-146-5	Metal Corrosion Category 1, Eye Irritant Category 2A
Sodium Gluconate	1-5	527-07-1	208-407-7	Not Classified Under GHS
Sodium Glucoheptonate	1-5	31138-65-5	250-480-2	Not Classified Under GHS
Alkyl ether Hydroxypropyl Sultaine	1-5	108797-84-8	Not Available 108797-85-9	Skin Irritant Category 2, Eye Irritant Category 2A

SECTION 4 – FIRST AID MEASURES

EYE CONTACT	:	Immediately flush the eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Get immediate medical attention.
SKIN CONTACT	:	Remove contaminated clothing and shoes. Wash affected skin area with soap and water. Delayed skin damage is possible if the product is not completely washed off. Get immediate medical attention.
SWALLOWING (INGESTION)	:	If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Get immediate medical attention.
INHALATION	:	Remove to fresh air. Get immediate medical attention.
GENERAL MEASURES	:	Never give anything by mouth to an unconscious person. Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	:	Water spray, fog, carbon dioxide, foam, dry chemical
SPECIAL HAZARDS (FIRE)	:	Not flammable.
EXPLOSION HAZARDS	:	Product is not explosive.
REACTIVITY (FIRE)	:	Thermal decomposition generates: Corrosive vapors. If the product is involved in a fire, it can release explosive hydrogen gas. When heated to decomposition, emits toxic fumes. May be corrosive to metals.
SPECIAL INSTRUCTIONS TO FIRE FIGHTERS		
PRECAUTIONARY MEASURES	:	Exercise caution when fighting any chemical fire.
FIREFIGHTING INSTRUCTIONS	:	Use water spray or fog for cooling exposed containers.
PROTECTION DURING FIREFIGHTING	:	Do not enter fire area without proper protective equipment, including respiratory protection.
HAZARDOUS COMBUSTION PRODUCTS	:	Potassium oxides. May liberate toxic gases. Sodium oxides. Phosphorous oxides. Nitrogen oxides. Carbon oxides (CO, CO ₂). Explosive Hydrogen gas.
OTHER INFORMATION (FIRE)	:	Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

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- PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES** : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.
- ENVIRONMENTAL PRECAUTIONS** : Keep spilled material away from sewage/drainage systems and waterways. This product contains a U.S. EPA Reportable Quantity (RQ) substance. If amounts exceeding the Reportable Quantity are released, notification of the National Response Center (800) 424-8802 is required. See section 15 for more information.
- METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP** : All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

SECTION 7 – HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING** : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink, or smoke when using this product. Wash hands and forearms thoroughly after handling.
- CONDITIONS FOR SAFE STORAGE** : Store in a dry, cool, and well-ventilated place. Keep container closed when not in use. Keep/store away from extremely high or low temperatures, direct sunlight, heat, and incompatible materials (Strong acid, Strong oxidizers).



SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- TLV (THRESHOLD LIMIT VALUE)** : The TLV in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	OSHA PEL – TWA	ACGIH TLV-Ceiling	ACGIH – STEL
Sodium Hydroxide	2 mg/m ³ (Ceiling)	2mg/m ³	2mg/m ³ (Ceiling)
Aminotrimethylene Phosphonic Acid	Not Established	Not Established	Not Established
Sodium Gluconate	Not Established	Not Established	Not Established
Sodium Heptonate	Not Established	Not Established	Not Established
Alkyl ether Hydroxypropyl Sultaine	Not Established	Not Established	Not Established
EYE PROTECTION	Wear chemical splash goggles or face shield.		
SKIN PROTECTION	Minimize contact with product. Wear chemical resistant coveralls, boots, gloves, apron and/or suitable long-sleeved clothing.		
RESPIRATORY PROTECTION	In case of brief exposure use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.		
VENTILATION	Ensure adequate ventilation.		
ADDITIONAL MEASURES	Emergency eyewash and safety shower facilities should be available in the immediate work area.		
REQUIRED WORK/HYGIENE	Wash hands thoroughly after handling. Keep away from all food stuff, beverages, and feed. Do not eat, drink or smoke in work area.		

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	:	Clear amber liquid with mild odor
ODOR	:	Mild odor
ODOR THRESHOLD	:	Not available
PH	:	> 13.5
MELTING POINT/FREEZING POINT	:	Not available
BOILING POINT	:	Not available
FLASHPOINT	:	Not applicable
EVAPORATION RATE	:	Not available
FLAMMABILITY	:	Nonflammable, Noncombustible
LOWER FLAMMABILITY LIMIT	:	Not applicable
UPPER FLAMMABILITY LIMIT	:	Not applicable
VAPOR PRESSURE	:	Not available
VAPOR DENSITY (AIR=1)	:	Not available
RELATIVE DENSITY	:	1.48
SOLUBILITY IN WATER	:	Soluble in water
PARTITION COEFFICIENT n-octanol/water	:	Not available
AUTOIGNITION TEMPERATURE	:	Not available
DECOMPOSITION TEMPERATURE	:	Not available

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY	:	Thermal decomposition generates: Corrosive vapors. If the product is involved in a fire, it can release explosion hydrogen gas. When heated to decomposition, emits toxic fumes. May be corrosive to metals.
STABILITY	:	Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID	:	Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible materials.
INCOMPATIBLE MATERIALS	:	Strong acids. Strong oxidizers. Soft metals. May be corrosive to metal.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon oxides (CO, CO ₂). Thermal decomposition generates: Corrosive vapors. Toxic gases. Hydrogen gas. Nitrogen oxides. Phosphorous oxides. Sodium oxides. Potassium oxides.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	:	Sodium Hydroxide
ACUTE TOXICITY	:	Draize test, rabbit, eye: 400 ug Mild. Draize test, rabbit, eye: 1% Severe. Draize test, rabbit, eye: 50 ug/24H Severe. Draize test, rabbit, eye: 1 mg/24H Severe. Draize test, rabbit, skin: 500 mg/24H Severe.
EYE CONTACT	:	Causes severe eye damage.
SKIN CONTACT	:	Causes skin burns. Onset of symptoms may be delayed following exposure.
INHALATION	:	Corrosive to respiratory tract.
INGESTION	:	Corrosive to respiratory tract.
CARCINOGENICITY	:	The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65
TOXICOLOGICAL INFORMATION	:	Aminotrimethylene Phosphonic acid

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ACUTE TOXICITY	: LD50 Oral (Rat): 2910mg/kg, LD50 Dermal (Rabbit): > 6310mg/kg.
CHRONIC EFFECTS ON HUMANS	: Rat 24months: > 500 mg/kg. Conclusion: Practically nontoxic.
OTHER TOXIC EFFECTS ON HUMANS	: Skin and Eyes (Rabbit): Moderate Irritant.
TOXICOLOGICAL INFORMATION	Sodium Gluconate
ACUTE TOXICITY	: LD50: Not available, LC50: Not available.
CHRONIC EFFECTS ON HUMANS	: Not available.
OTHER TOXIC EFFECTS ON HUMANS	: Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.
TOXICOLOGICAL INFORMATION	Sodium Glucoheptonate
ACUTE TOXICITY	: LD50: Oral (Rat): 980mg/kg.
CARCINOGENICITY	: Not listed with ACGIH, IARC, NIOSH, NTP, OSHA.
OTHER TOXIC EFFECTS ON HUMANS	: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
TOXICOLOGICAL INFORMATION	Alkyl ether Hydroxypropyl Sultaine
ACUTE TOXICITY	: LD50 Oral (Rat): 13,800mg/kg, Skin (rabbit): Slightly irritating, Eyes (rabbit): Slightly irritating. Acute Inhalation Toxicity: No data found
CARCINOGENICITY	: This product is not considered to be probable or suspected human carcinogens by IARC, ACGIH, NTP or OSHA.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	Sodium Hydroxide
ECOTOXICITY	: Immobilization EC50/48h/Daphnia-40.38 mg/l. LC50 /96h/Mosquito fish-125 mg/l.
ENVIRONMENTAL	: No information found.
PHYSICAL	: No information found.
OTHER	: No relevant information available.
PERSISTENCE AND DEGRADABILITY	: No relevant information available.
BIOACCUMULATIVE POTENTIAL	: No relevant information available.
NOTES	: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of this product to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized. Rinse off larger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.
ECOLOGICAL INFORMATION	Aminotrimethylene Phosphonic Acid
ECOTOXICITY	: Acute LC50 fish (fresh water) 14 days: 160mg/L, LC50 Daphnia-Daphnia Magna (fresh water) 48hr: 297 mg/L, LC50 Daphnia (marine water) 48hr: 94mg/L
CHRONIC TOXICITY	: Fish (fresh water) 60 days @ 23mg/L: No observable effect. Daphnia (fresh water) 28 days @ >25mg/L: No observable effect
BIODEGRADATION	: Biodegradable.
TOXICITY OF PRODUCTS OF BIODEGRADATION	: The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION	Sodium Gluconate
ECOTOXICITY	: Not available
BOD5 AND COD	: Not available
PRODUCTS OF	: Possibly hazardous short term degradation products are not likely. However, long

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BIODEGRADATION	: term degradation products may arise.
TOXICITY OF PRODUCTS OF BIODEGRADATION	: The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION	: Sodium Glucoheptonate
ECOTOXICITY	: Not available
BOD5 AND COD	: Not available
PRODUCTS OF BIODEGRADATION	: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
TOXICITY OF PRODUCTS OF BIODEGRADATION	: The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION	: Alkyl ether Hydroxypropyl Sultaine
ECOTOXICITY	: Not available.
PERSISTENCE AND DEGRADABILITY	: No data available.
BIOACCUMULATIVE POTENTIAL	: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL RECOMMENDATIONS	: This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.
ECOLOGY-WASTE MATERIALS	: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME	: UN1824, SODIUM HYDROXIDE, SOLUTION 8 PGII
HAZARD CLASS AND LABEL	: 8 (Corrosive)
UN NUMBER	: UN 1824
PACKAGING GROUP	: PGII
EPA REPORTABLE QUANTITY (RQ)	: 1000 LBS. (454 KG) as Sodium Hydroxide 100%.
MARINE POLLUTANT	: No
EMERGENCY RESPONSE GUIDE	: ERG-154



SECTION 15 – REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN	: Not listed
TSC STATUS	: The ingredients of this product are listed on TSCA (Toxic Substances Control Act) inventory (40CFR 710.)
SARA SECTION 302	: None
SARA SECTION 311/312	: Immediate (acute) health hazard.
HAZARD CLASS	
SARA SECTION 313	: Not Listed
NFPA HEALTH	: 3
NFPA FLAMMABILITY	: 0

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NFPA REACTIVITY : 1

CANADIAN REGULATORY INFORMATION

WHMIS CATEGORY : Class E: Corrosive: Sodium Hydroxide



DOMESTIC SUBSTANCES LIST (DSL) : Listed

INGREDIENT DISCLOSURE LIST : Listed, this product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

SECTION 16 – OTHER INFORMATION

DISCLAIMER : The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Wesmar Co. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act.

EINECS : European Inventory of Existing Commercial Chemical Substances

IMDG : International Maritime Code for Dangerous Goods

IARC : International Agency for Research on Cancer

IATA : International Air Transportation Association

ACGIH : American Conference of Governmental Industrial Hygienists

NFPA : National Fire Protection Association (USA)

NTP : National Toxicology Program

SARA : Superfund Amendments and Reauthorization Act

TSCA : Toxic Substances Control Act

HMIS : Hazardous Materials Identification System (USA)

WHMIS : Workplace Hazardous Materials Information System

LC50 : Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

STOT : Systemic Target Organ Toxicity

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