

SAFETY DATA SHEET

Date Prepared : 2/13/2015

SDS No : NAR

Arctic Kleen NF

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Arctic Kleen NF

GENERAL USE: Cleaning sub-freezing surfaces in freezer lockers and cold storage warehouses.

PRODUCT DESCRIPTION: Non Flammable Freezer Cleaner

PRODUCT CODE: NAR

CHEMICAL FAMILY: Glycol/alkali blend

MANUFACTURER

MISCO Products Corporation
1048 Stinson Drive
Reading, PA 19605

Emergency Phone: 610-926-4106

Customer Service: 800-548-4568

Transportation: 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924

POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2A

Skin Irritation, Category 2

Target Organ Toxicity (Repeated exposure - oral), Category 2 (Kidney)

Acute Toxicity (Oral), Category 4

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H302: Harmful if swallowed.

3342E9DB: May cause damage to organs (kidney) through prolonged or repeated exposure if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P260: Do not breathe mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P233: Keep container tightly closed.

P102: Keep out of reach of children.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P332+P313: If skin irritation occurs: Get medical advice/attention.
 P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P330: Rinse mouth.
 P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
 P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

P404: Store in a closed container.
 P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with local, state and federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear Liquid
IMMEDIATE CONCERNS: Eye & Skin irritant

POTENTIAL HEALTH EFFECTS

EYES: Contact causes severe eye irritation.
SKIN: Skin irritant with prolonged or repeated contact.
SKIN ABSORPTION: None Expected.
INGESTION: Harmful if swallowed.
INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: No known significant effects or critical hazards.

CARCINOGENICITY: Not Established

MUTAGENICITY: No known significant effects or critical hazards.

MEDICAL CONDITIONS AGGRAVATED: Previous skin conditions such as dermatitis may be aggravated.

ROUTES OF ENTRY: Breathing of mist or vapors. Ingestion.

CANCER STATEMENT: None

WARNING CAUTION LABELS: Irritant

PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Ethylene Glycol	35 - 40	107-21-1
Ethylene glycol butyl ether	5 - 10	111-76-2
Potassium Hydroxide	0 - 1	1310-58-3
Nonylphenol Ethoxylate	0 - 1	9016-45-9
Water	80 - 85	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.
SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.
INGESTION: DO NOT DELAY. Do not induce vomiting. If victim is alert, rinse mouth and drink 1/2 to 1 glass of water to help dilute the material. Do not give liquids to a drowsy, convulsing, or unconscious person. Transport to nearest medical facility for

additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, tearing, redness, swelling.

SKIN: Prolonged contact will cause irritation marked by redness, burning sensation.

SKIN ABSORPTION: Not Established

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Not Established

NOTES TO PHYSICIAN: Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

ADDITIONAL INFORMATION: IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! May cause significant renal, respiratory, and CNS toxicity. May cause significant acidosis. Call a doctor or poison control center for guidance.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable

GENERAL HAZARD: NA = Not Applicable

EXTINGUISHING MEDIA: Not required. Water based material.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not contaminate water, food, or feed by storage or disposal.

HANDLING: Wear eye protection, rubber gloves when handling concentrate.

STORAGE: Store in area inaccessible to children.

STORAGE TEMPERATURE: Store at ambient temperatures.

STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethylene Glycol	TWA				100		
	STEL					50	127
Ethylene glycol butyl ether	TWA	50	240	20	97	NL	NL
	STEL					NL	NL
Potassium Hydroxide	TWA		2 mg/m ³				
	STEL				2 mg/m ³		

ENGINEERING CONTROLS: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles.

SKIN: Rubber or other chemical resistant gloves. Rubber boots of used on floors.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

PROTECTIVE CLOTHING: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Characteristic.

ODOR THRESHOLD: Not Established

COLOR: Colorless

pH: 11.8 to 13.0

PERCENT VOLATILE: >60

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: ≤ 20 mm Hg at (68°F)

VAPOR DENSITY: ≤ 1 Air = 1

BOILING POINT: 212° F; 100° C

FREEZING POINT: < -20.56°C (-5.0°F)

MELTING POINT: Not Available

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Complete

EVAPORATION RATE: (Water =1) <1.0

DENSITY: 8.60 at (68°F)

SPECIFIC GRAVITY: 1.031 grams/ml.

VISCOSITY: Water thin.

(VOC): 9.450 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: No

CONDITIONS TO AVOID: Not Established

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

INCOMPATIBLE MATERIALS: Strong acids, oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Ethylene Glycol	300 to 2000 mg/kg (rat)	> 5000 mg/kg (rat)	
Ethylene glycol butyl ether	1300 mg/kg (rat)	> 2000 mg/kg (rabbit)	> 3.1 mg/l
Potassium Hydroxide	273 mg/kg (rat)	N/A	
Nonylphenol Ethoxylate	16000 mg/kg (rat)	4490 mg/kg (rabbit)	

EYES: Not Established

DERMAL LD₅₀: Not Established

SKIN ABSORPTION: None Expected.

ORAL LD₅₀: Not Established

INHALATION LC₅₀: Not Established

EYE EFFECTS: Severe eye irritant.

SKIN EFFECTS: Moderate skin irritant.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Ethylene glycol butyl ether	No listed substance	Group 3 - Not classifiable as to its carcinogenicity to Humans	No listed substance

IARC:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of 2-butoxyethanol in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

IRRITATION: Irritant

SENSITIZATION: No known significant effects or critical hazards.

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: Can cause kidney damage with prolonged or repeated oral exposure.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: Not Established

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Small amounts (less than 1 gallon) may be diluted with copious amounts of water and disposed of into sanitary sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: See above.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

RCRA/EPA WASTE INFORMATION: NA = Not Applicable

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Cleaning Compound, not regulated.

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Cleaning Compound, not regulated.

AIR (ICAO/IATA)

SHIPPING NAME: Cleaning Compound, not regulated.

VESSEL (IMO/IMDG)

SHIPPING NAME: Cleaning Compound, not regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health Hazard - Acute; Health Hazard -Chronic

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Ethylene Glycol, 2-butoxyethanol 111-76-2 (Category: N230 Certain Glycol Ethers)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Ethylene Glycol	35 - 40	107-21-1
Ethylene glycol butyl ether	5 - 10	111-76-2

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Ethylene Glycol	35 - 40	5,000 lbs.
Potassium Hydroxide	0 - 1	1,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Ethylene Glycol	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Ethylene glycol butyl ether	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Potassium Hydroxide	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Nonylphenol Ethoxylate	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance

CALIFORNIA PROPOSITION 65: None

CARCINOGEN:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of 2-butoxyethanol in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

16. OTHER INFORMATION

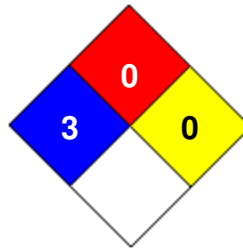
PREPARED BY: Regulatory Affairs Department

Date Prepared: 2/13/2015

HMIS RATING

HEALTH		3
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION	D	

NFPA CODES



MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.