Safety Data Sheet

Material Name: SAFETY KLEEN NF1000 ICE BREAKER **SDS ID: 820043**

* * * Section 1 - Identification * * *

Product Identifier

SAFETY KLEEN NF1000 ICE BREAKER

Product Code

6560, 6571, 32170

Synonyms

NF1000 ICE BREAKER WINTER BLEND
NF1000 ICE BREAKER SUMMER BLEND
SAFETY-KLEEN BUG BUSTER
Premixed, Non-Flammable Windshield Washer Fluid

Recommended Use

Automotive windshield washer fluid, winter and summer blends. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATES OF ARIZONA, CALIFORNIA, GEORGIA, OREGON, AND TEXAS

Manufacturer Information

Safety-Kleen Systems, Inc.
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Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

January 10, 2015

Supersedes Issue Date

October 19, 2012

Original Issue Date

May 16, 2008

* * * Section 2 - Hazard(s) Identification * * *

Classification in Accordance with 29 CFR 1910.1200.

Acute Toxicity (Oral), Category 3
Acute Toxicity (Dermal), Category 3
Acute Toxicity (Inhalation), Category 3
Specific Target Organ Toxicity - Single Exposure, Category 1 (organs)

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

DANGER!

Hazard Statement(s)

Toxic if swallowed
Toxic in contact with skin

Toxic if inhaled

Causes damage to organs

Precautionary Statement(s)

Prevention

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/clothing. Do not breathe vapor or mist.

Response

IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment may be needed, see first aid section of Safety Data Sheet. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment may be needed, see first aid section of Safety Data Sheet. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Specific treatment may be needed, see first aid section of Safety Data Sheet. Rinse mouth.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS	Component	Percent
7732-18-5	Water	60-80
67-56-1	Methanol	25-35
57-55-6	1,2-Propylene glycol	1-5

* * * Section 4 - First Aid Measures * * *

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Most Important Symptoms/Effects

Acute

Toxic if swallowed, toxic if inhaled, toxic in contact with skin, organ damage.

Delayed

No information on significant adverse effects.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively. Antidote should be administered by qualified medical personnel. For methanol poisoning, consider administrating ethanol orally or 4-methylpyrazole intravenously or orally. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

* * * Section 5 - Fire-Fighting Measures * * *

Suitable Extinguishing Media

Carbon dioxide, alcohol-resistant foam, dry chemical, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Slight fire hazard. Avoid friction, static electricity and sparks.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

The material does not sustain combustion as tested in accordance with the requirements outlined in the Code of Federal Regulations, Title 49 Part 173, Appendix H and the United Nations Transport of Dangerous Goods, Manual of Tests and Criteria (Test Method L.2). Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

NFPA Ratings: Health: 2 **Fire:** 1 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8: Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15: Regulatory Information**.

* * * Section 7 - Handling and Storage * * *

Precautions for Safe Handling

Wash thoroughly after handling. Wear protective gloves/clothing. Do not eat, drink or smoke when using this product. Do not breathe vapor or mist.

Conditions for Safe Storage, Including Any Incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. See **Section 14: Transportation Information** for Packing Group information.

Incompatibilities

Avoid acids, alkalies, oxidizing agents, reactive halogens, or reactive metals.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Methanol (67-56-1)

ACGIH:	200 ppm TWA
	250 ppm STEL
	Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final:	200 ppm TWA; 260 mg/m3 TWA
OSHA Vacated:	200 ppm TWA; 260 mg/m3 TWA
	250 ppm STEL; 325 mg/m3 STEL
	Prevent or reduce skin absorption
NIOSH:	200 ppm TWA; 260 mg/m3 TWA
	250 ppm STEL; 325 mg/m3 STEL
	Potential for dermal absorption

Appropriate Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Ensure compliance with applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Eye protection: Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber (latex) or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance/Odor :	Liquid, clear and blue, alcohol odor	**pH:**	Not applicable
Boiling Point:	178-212°F (81.1-100°C)	**Odor Threshold:**	Not available
Solubility (H2O):	Complete	**Melting Point:**	Not available
Density:	Not available	**Specific Gravity:**	0.96 (winter blend)
Evaporation Rate:	Not available	**Octanol/H2O Coeff.:**	Not available.
LFL:	5.5%	**Auto Ignition Temperature:**	Not available
UFL:	36.5%	**Flash Point:**	>100°F (37.8°C)
Vapor Pressure:	40 mm Hg @ 70°F (21.2°C)	**Viscosity:**	Not available
Decomposition Temperature:	Not available	**Vapor Density:**	1.1 (air = 1)

Other Property Information

No information is available.

* * * Section 10 - Stability & Reactivity * * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions To Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalies, oxidizing agents, reactive halogens, or reactive metals.

Hazardous Decomposition Products

None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS**.

* * * Section 11 - Toxicological Information * * *

Toxicity Data and Information

Component Analysis - LD50/LC50

Methanol (67-56-1)

Oral LD50 Rat 5628 mg/kg; Inhalation LC50 Rat 83.2 mg/L 4 h

1,2-Propylene glycol (57-55-6)

Dermal LD50 Rabbit 20800 mg/kg; Oral LD50 Rat 20000 mg/kg

Information on Likely Routes of Exposure

Inhalation

Toxic if inhaled.

Ingestion

Toxic if swallowed.

Skin Contact

Toxic in contact with skin.

Eye Contact

No information on significant adverse effects.

Immediate Effects

Toxic if swallowed, toxic if inhaled, toxic in contact with skin, organ damage.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity

No information available for the product.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Teratogenicity

Based on best current information, there is no known teratogenicity associated with this product.

Reproductive Effects

Based on best current information, there is no known reproductive toxicity associated with this product.

Specific Target Organ Effects - Single Exposure

No target organs identified.

Specific Target Organ Effects - Repeated Exposure

No information on significant adverse effects.

Aspiration Hazard

No data available.

Medical Conditions Aggravated by Exposure

Central nervous system disorders, eye disorders, skin disorders, systemic disorders, reproductive disorders

* * * Section 12 - Ecological Information * * *

Ecotoxicity

Component Analysis - Ecotoxicity - Aquatic Toxicity

Methanol (67-56-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	28200 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	>100 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	19500 - 20700 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	18 - 20 mL/L [static]	
96 Hr LC50 Lepomis macrochirus	13500 - 17600 mg/L [flow-through]	

1,2-Propylene glycol (57-55-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	51600 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	41 - 47 mL/L [static]	
96 Hr LC50 Pimephales promelas	51400 mg/L [static]	
96 Hr LC50 Pimephales promelas	710 mg/L	
96 Hr EC50 Pseudokirchneriella subcapitata	19000 mg/L	
48 Hr EC50 Daphnia magna	>1000 mg/L [Static]	

Persistence and Degradability

The product is biodegradable.

Bioaccumulation Potential

Low bioconcentration.

Mobility in Soil

Expected to have high mobility in soil.

Other Adverse Effects

No additional information is available.

* * * Section 13 - Disposal Considerations * * *

Disposal Methods

D001 Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product. Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

* * * Section 14 - Transport Information * * *

International Transportation Regulations

DOT WINTER BLEND <2900 gal, SUMMER BLEND <7500 gal: NOT REGULATED

WINTER BLEND >2900 gal, SUMMER BLEND >7500 gal:
Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s., Methanol
UN/NA #: UN3082 **Hazard Class:** 9 **Packing Group:** III
Additional Information: Methanol RQ: 5000 lb (2270 kg)

TDG Not regulated.

* * * Section 15 - Regulatory Information * * *

Volatile Organic Compounds (As Regulated)

ICE BREAKER

23 WT%; 1.9 LB/US gallon; 228 g/L; Non-photochemically reactive.
Methanol VP approx. 96 mmHg @ 20°C

SUMMER BLEND:

9.0 WT%; 0.74 LB/US gallon; 89 g/L; Non-photochemically reactive.
Methanol VP approx. 96 mmHg @ 20°C

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

Acute Health: Yes **Chronic Health:** No **Fire:** Yes **Pressure:** No **Reactive:** No

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Methanol (67-56-1)	1.0 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Methanol (67-56-1)	5000 lb final RQ; 2270 kg final RQ

TSCA Inventory

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Water	7732-18-5	Yes
Methanol	67-56-1	Yes
1,2-Propylene glycol	57-55-6	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Methanol	67-56-1	Yes	Yes	Yes	Yes	Yes
1,2-Propylene glycol	57-55-6	No	No	Yes	Yes	Yes

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATES OF ARIZONA, CALIFORNIA, GEORGIA, OREGON, AND TEXAS.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Water	7732-18-5	DSL
Methanol	67-56-1	DSL
1,2-Propylene glycol	57-55-6	DSL

Canadian WHMIS Information

B2, D2A, D2B.

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Methanol (67-56-1) 1 %

1,2-Propylene glycol (57-55-6) 1 %

* * * Section 16 - Other Information * * *

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplier to the user.

End of Sheet 820043