

Safety Data Sheet

Material Name: ArmaKleen M-Defoamer-HD

SDS ID: 820037

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

ArmaKleen M-Defoamer-HD

Product Code

6310, 6343, 6443

Formula Code 42000135

Product Use

Anti-foam composition used in aqueous cleaning machines. If this product is used in combination with other products, refer to the Safety Data Sheets for those products.

Restrictions on Use

For professional use only.

MANUFACTURER

Safety-Kleen Systems, Inc.
42 Longwater Drive
Norwell, MA 02061-9149 U.S.A.
Phone: 1-800-669-5740
www.safety-kleen.com

SUPPLIER (in the U.S.A.)

Safety-Kleen Systems, Inc.
42 Longwater Drive
Norwell, MA 02061-9149
Phone: 1-800-669-5740
www.safety-kleen.com

SUPPLIER (in Canada)

Safety-Kleen Canada Inc.
25 Regan Road
Brampton, Ontario, L7A 1B2
Canada
Phone: 1-800-669-5740

Emergency Telephone Number

Medical: 1-888-234-1828 Chemical: 1-800-255-3924 (CHEMTEL)

Issue Date

January 21, 2025

Supersedes Issue Date

May 5, 2021

Original Issue Date

December 1, 2007

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

None needed according to classification criteria.

GHS Label Elements

Symbol(s)

None needed according to classification criteria.

Signal Word

None needed according to classification criteria

Hazard Statement(s)

None needed according to classification criteria.

Precautionary Statement(s)

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

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Storage

None needed according to classification criteria. Do not store below 40°F (4.4°C).

Other hazards

Contact with heated material may cause serious thermal burns.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	60-100
57-55-6	1,2-Propanediol	0.1-1
Mixture	Non-hazardous ingredients	0.1-1

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.

Skin

IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Call a POISON CENTER or doctor. For thermal burns caused by contact with hot product, remove affected clothing and shoes. Wash skin thoroughly with cool water. Apply cool-packs or ice.

Eyes

IF IN EYES: If irritation or redness from exposure to vapor or mist develops, move away from exposure and rinse cautiously with water for 5 minutes. Upon direct contact with liquid, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention, if needed.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician. Never give anything by mouth to an unconscious person.

Most Important Symptoms/Effects

Acute

May cause skin irritation. May cause eye irritation. May cause respiratory irritation. Contact with heated product can cause serious thermal burns.

Delayed

No information on significant adverse effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

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Unsuitable Extinguishing Media

Do not use high-pressure water streams. Avoid using a direct stream of water. Directly spraying water or foam onto hot burning product may cause frothing.

Special Hazards Arising from the Chemical

Heated material may cause thermal burns.

Hazardous Combustion Products

Burning may produce oxides of carbon.

Advice for firefighters

Containers may rupture if heated or exposed to continual naked flame.

Fire Fighting Measures

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Special Protective Equipment and Precautions for Firefighters

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

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 Cleaning Up

Spilled product is slippery. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. 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, spark proof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from naked flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. Use in a well ventilated area. Avoid contact with eyes Skin clothing shoes.

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria. Do not store below 40°F (4.4°C).

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from naked flame. Empty product containers may retain product residue and can be dangerous.

Incompatible Materials

Oxidizers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

1,2-Propanediol	57-55-6
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Ontario	10 mg/m ³ TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present) aerosol only ; 50 ppm TWA aerosol and vapor ; 155 mg/m ³ TWA aerosol and vapor
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ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

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.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Skin Protection/Glove Recommendations

Where skin contact is likely, wear gloves impervious to product; 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 face shield, boots, apron, whole body suits or other protective clothing. When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

Protective Materials

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, and Lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Milky white, viscous liquid	Physical State	Liquid
Odor	Mild	Color	milky white
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	Not available
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	<1 (air)
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available

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Water Solubility	(dispersible)	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Kinematic viscosity	Not available
Solubility (Other)	Not available	Density	0.9
Physical Form	Liquid.	Molecular Weight	Not available
Volatile Organic Compounds (As Regulated)	0.0 WT%; 0.0 LB/US gal; 0.0 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mm Hg Consult with your state/local air pollution control agency and their rules/regulations for specific direction in your specific area.		

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition

Incompatible Materials

Oxidizers.

Hazardous decomposition products

None under normal temperatures and pressures.

Thermal decomposition products

Oxides of carbon. Decomposition above 150°C. If product is heated to decomposition (above 302°F (150°C)), small amounts of formaldehyde vapors may be released.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause respiratory irritation.

Skin Contact

May cause skin irritation. Contact with heated material may cause serious thermal burns.

Eye Contact

May cause eye irritation.

Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

1,2-Propanediol (57-55-6)

Oral LD50 Rat 20 g/kg; Dermal LD50 Rabbit 20800 mg/kg

Product Toxicity Data

Acute Toxicity Estimate

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Dermal	> 2000 mg/kg
Inhalation - Vapor	> 20 mg/L
Oral	> 2000 mg/kg

Immediate Effects

May cause skin irritation. May cause eye irritation. May cause respiratory irritation.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

May cause skin irritation. May cause eye irritation. May cause respiratory irritation. Contact with heated material may cause serious thermal burns.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

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

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No data available

Reproductive Toxicity

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

No information on significant adverse effects.

Specific Target Organ Toxicity - Repeated Exposure

No information on significant adverse effects.

Aspiration hazard

No information available for the product.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Section 12 - ECOLOGICAL INFORMATION
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Component Analysis - Aquatic Toxicity

1,2-Propanediol	57-55-6
Fish:	LC50 96 h Oncorhynchus mykiss 51600 mg/L [static]; LC50 96 h Oncorhynchus mykiss 41 - 47 mL/L [static]; LC50 96 h Pimephales promelas 51400 mg/L [static]; LC50 96 h Pimephales promelas 710 mg/L
Algae:	EC50 96 h Pseudokirchneriella subcapitata 19000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L [Static] EPA

Persistence and Degradability

No information available for the product.

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Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact ArmaKleen regarding proper recycling or disposal.

Section 14 - TRANSPORT INFORMATION

US DOT Information: Not regulated for transport.

IATA Information: Not regulated for transport.

TDG Information: Not regulated for transport.

Section 15 - REGULATORY INFORMATION
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Canada Regulations

CEPA - Priority Substances List

None of this product's components are on the list.

Ozone Depleting Substances

None of this product's components are on the list.

Council of Ministers of the Environment - Soil Quality Guidelines

None of this product's components are on the list.

Council of Ministers of the Environment - Water Quality Guidelines

None of this product's components are on the list.

U.S. Federal Regulations

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2016 reporting categories

Acute Health: No **Chronic Health:** No **Fire:** No **Pressure:** No **Reactivity:** No

California

Not listed under California Proposition 65.

Component Analysis - Inventory

Water (7732-18-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	No	Yes	No
KR - REACH CCA			MX	NZ	PH	TH-TECI	TW	VN (Draft)
No			Yes	Yes	Yes	Yes	Yes	Yes

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1,2-Propanediol (57-55-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No
KR - REACH CCA			MX	NZ	PH	TH-TECI	TW	VN (Draft)
No			Yes	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

Other Information

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

NFPA Ratings

Health: 1 Fire: 1 Instability: 0

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

Summary of Changes

Update to logo and Manufacturer information.

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne - Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG -

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Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

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, ArmaKleen 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 supplied to the user.