

## Safety Data Sheet

Material Name: ArmaKleen M-100BCR Solution

SDS ID: 820252

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

ArmaKleen M-100BCR Solution

**Product Code**

Not applicable.

**Synonyms**

Not available.

**Product Use**

Aqueous, alkaline cleaner that has been diluted with water for cleaning. If this product is used in combination with other products, refer to the Safety Data Sheet 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](http://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](http://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**

1-800-468-1760

**Issue Date**

January 21, 2025

**Supersedes Issue Date**

May 5, 2021

**Original Issue Date**

April 3, 2017

### 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

Skin Sensitization - Category 1A

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Warning

**Hazard Statement(s)**

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May cause an allergic skin reaction.

## Precautionary Statement(s)

### Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves.

### Response

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

### Storage

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

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. Contact with heated material may cause serious thermal burns.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	91-99
6132-04-3	Trisodium citrate dihydrate	0.77-0.85
1984-06-1	Sodium caprylate	0.55-0.61
1356964-77-6	9-Decenamamide, N,N-dimethyl-	0.45-0.55
31138-65-5	D-gluco-Heptonic acid, monosodium salt, (2.xi.)-	0.38-0.42

## Section 4 - FIRST AID 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 if you feel unwell.

### Skin

IF ON SKIN (or hair): 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: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

### Ingestion

IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### Most Important Symptoms/Effects

#### Acute

Allergic skin reaction. Contact with heated product can cause severe burns to the eyes and skin and can result in permanent eye damage.

#### Delayed

No information on significant adverse effects.

### Indication of any immediate medical attention and special treatment needed

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Treat symptomatically and supportively.

## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Use media suitable for surrounding fire.

#### Unsuitable Extinguishing Media

Do not use high-pressure water streams.

### Special Hazards Arising from the Chemical

Heated material may cause thermal burns.

### Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce oxides of carbon, oxides of sodium.

### Advice for firefighters

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

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Keep storage containers with water spray. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

### Special Protective Equipment and Precautions for Firefighters

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

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

### Methods and Materials for Containment and Cleaning Up

Spilled product is slippery. Do not touch or walk through spilled product. 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 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 flames. Do not breathe dust or vapors. Contaminated work clothes should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

### Conditions for Safe Storage, Including any Incompatibilities

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 contain product residue and can be dangerous.

### Incompatible Materials

Acids, oxidizing materials, reducing agents.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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## Component Exposure Limits

There are no constituents of the product which have a PEL, TLV, or other recommended exposure limit.

## 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. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.

## 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/love 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. Lab coat or apron.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, yellow liquid	<b>Physical State</b>	Liquid
<b>Odor</b>	Sweet ,soapy odor	<b>Color</b>	Clear to yellow
<b>Odor Threshold</b>	Not available	<b>pH</b>	9.5 - 9.8
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212°F (100 °C)
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not applicable
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	17.5 mmHg @ 20°C
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	1.08
<b>Water Solubility</b>	Soluble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Kinematic viscosity</b>	Not available

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**Solubility (Other)**

Not available

**Density**

Not available

0.9 WT%; 0.0751 lb/US gal; 9 g/L; As per 40 CFR Part 51.100(s)

Product Vapor Pressure @ 20°C = 17.50 mmHg

VOC Content is less than 25 grams/liter:

**Volatile Organic Compounds  
(As Regulated)**

This solution is explicitly listed as either an “exempted” or a “Clean Air Solvent” by the South Coast Air Quality Management District (SCAQMD) because it does not contain reactive volatile organic compounds (VOCs) that can react with sunlight and nitrogen-dioxides to create ground-based ozone (smog). Consult with your state/local air pollution control agency and their rules/regulations for specific direction in your specific area. [www.aqmd.gov](http://www.aqmd.gov)

## Section 10 - STABILITY AND 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 naked flame and direct sunlight.

**Incompatible Materials**

Acids, oxidizing materials, reducing agents.

**Hazardous decomposition products**

None under normal temperatures and pressures. See also SECTION 5: Hazardous Combustion Products.

## Section 11 - TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

**Inhalation**

No information on significant adverse effects.

**Skin Contact**

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

**Eye Contact**

May cause 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:

**9-Decenamamide, N,N-dimethyl- (1356964-77-6)**

Oral LD50 Rat 550 mg/kg

**D-gluco-Heptonic acid, monosodium salt, (2.xi.)- (31138-65-5)**

Oral LD50 Rat >4040 mg/kg (no deaths occurred )

**Product Toxicity Data**

**Acute Toxicity Estimate**

Dermal	> 2000 mg/kg
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Oral	> 2000 mg/kg
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## Immediate Effects

May cause irritation, allergic skin reaction.

## Delayed Effects

No information on significant adverse effects.

## Irritation/Corrosivity Data

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

## Respiratory Sensitization

No information on significant adverse effects.

## Dermal Sensitization

May cause an allergic skin reaction.

## Component Carcinogenicity

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

## Germ Cell Mutagenicity

No data available.

## Tumorigenic Data

No data available

## Reproductive Toxicity

No data available.

## Specific Target Organ Toxicity - Single Exposure

No target organs identified.

## Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

## Aspiration hazard

No information on significant adverse effects.

## Medical Conditions Aggravated by Exposure

No data available.

## Section 12 - ECOLOGICAL INFORMATION

### Component Analysis - Aquatic Toxicity

9-Decenamamide, N,N-dimethyl-	1356964-77-6
Fish:	LC50 96 h Pimephales promelas >7.5 mg/L [flow-through ]

## Persistence and Degradability

No information available for the product.

## Bioaccumulative Potential

No information available for the product.

## Mobility

No information available for the product.

## Other Toxicity

No information available for the product.

## Section 13 - DISPOSAL CONSIDERATIONS

### Disposal Methods

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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.

<b>Section 14 - TRANSPORT INFORMATION</b>
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**US DOT Information:** Not regulated for transport.

**IATA Information:** Not regulated for transport.

**IMDG Information:** Not regulated for transport.

**TDG Information:** Not regulated for transport.

**International Bulk Chemical Code**

None available for this product.

<b>Section 15 - REGULATORY INFORMATION</b>
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**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

<b>D-gluco-Heptonic acid, monosodium salt, (2.xi.)-</b>	<b>31138-65-5</b>
TSCA 12b:	Section 4 , 1 % de minimis concentration

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

Respiratory/Skin Sensitization

**U.S. State Regulations**

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

Component	CAS	CA	MA	MN	NJ	PA
<b>Triethylenetetramine</b>	<b>112-24-3</b>	No	Yes	No	Yes	Yes

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

Not listed under California Proposition 65.

**Component Analysis - Inventory**

**Trisodium citrate dihydrate (6132-04-3)**

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

**Sodium caprylate (1984-06-1)**

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

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KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	No	Yes	Yes	No	Yes	Yes

**9-Decenamamide, N,N-dimethyl- (1356964-77-6)**

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

**D-gluco-Heptonic acid, monosodium salt, (2.xi)- (31138-65-5)**

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			No	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: 2 Fire: 0 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 -

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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 - 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.