



## Safety Data Sheet

Material Name: ArmaKleen M-GP Aqueous Precision Cleaner Concentrate

SDS ID: 82850

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

ArmaKleen M-GP Aqueous Precision Cleaner Concentrate

**Product Code**

6332, 6432

Formula Code 42000117

**Synonyms**

Not available.

**Product Use Recommended Use**

Aqueous, alkaline, concentrated cleaner that is to be diluted with water and used for cleaning aluminum, magnesium, titanium, ferrous and non-ferrous alloys as well as plastic, glass, and composite materials. 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**

Church & Dwight  
The ArmaKleen™ Company  
469 North Harrison Street  
Princeton, NJ 08543  
Phone: (800) 332-5424  
[www.churchdwight.com](http://www.churchdwight.com)

**SUPPLIER (in the U.S.A.)**

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 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: 1-800-424-9300 (CHEMTREC)

**Issue Date**

February 26, 2020

**Supersedes Issue Date**

March 6, 2017

**Original Issue Date**

July 16, 1996

### 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 Corrosion/Irritation - Category 1A

Serious Eye Damage/Eye Irritation - Category 1

Skin Sensitization - Category 1A

Specific Target Organ Toxicity - Repeated Exposure - Category 2

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## GHS Label Elements

### Symbol(s)



### Signal Word

Danger.

### Hazard Statement(s)

Causes severe skin burns and eye damage.

May cause allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

### Precautionary Statement(s)

#### Prevention

Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

#### Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. 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. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

#### Storage

Store locked up. Do not store below 40°F.

#### Other hazards

Repeated exposure may cause skin dryness or cracking. 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	70-77
111905-52-3	Alcohols, C9-11-branched and linear, butoxylated ethoxylated	6.9 -7.6
584-08-7	Carbonic acid, dipotassium salt	5.5-6.5
3302-10-1	Hexanoic acid, 3,5,5-trimethyl-	3.0-3.3
2687-94-7	2-Pyrrolidinone, 1-octyl-	1.4-1.6

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9004-83-5	Poly(oxy-1,2-ethanediyl), .alpha.-[2-(tert-dodecylthio)ethyl]-.omega.-hydroxy-	0.55-0.61
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## Section 4 - FIRST AID MEASURES

### Inhalation

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

### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. This product may be heated during use. Contact with hot product can cause serious thermal burns.

### 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.

### Ingestion

IF SWALLOWED: Rinse mouth. If swallowed, do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

### Most Important Symptoms/Effects

#### Acute

Causes skin burns, eye burns, allergic skin reaction.

#### Delayed

May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged skin contact may cause dermatitis due to defatting of the skin.

### 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.

#### Unsuitable Extinguishing Media

Do not use high-pressure water streams. Avoid using a direct stream of water.

### Special Hazards Arising from the Chemical

Negligible fire hazard.

### Hazardous Combustion Products

Burning may produce oxides of carbon, nitrogen oxides.

### Advice for firefighters

Containers may rupture or explode if exposed to heat.

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Keep storage containers cool with water spray. Heated containers may rupture. "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.

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## 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. Remove all ignition sources. 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 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.

### Environmental Precautions

Prevent material from entering drains or sewers.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Keep away from sparks and naked flame. Do not breathe dust or vapors. Contaminated work clothing 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

Store locked up. Do not store below 40°F.

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 heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. May be corrosive to metals.

### Incompatible Materials

Oxidizers, reducing agents, acids.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

Canada and ACGIH have not developed exposure limits for any of this product's components.

### 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

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection by air purifying respirators is limited.

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.

#### 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.

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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 tan liquid	<b>Physical State</b>	Liquid
<b>Odor</b>	Mild	<b>Color</b>	Clear , tan
<b>Odor Threshold</b>	Not available	<b>pH</b>	11.6 (aqueous solution )
<b>Melting Point</b>	32°F (0 °C)	<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 available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	>212°F (>100 °C)
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	1.05
<b>Water Solubility</b>	(complete)	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	Not available
<b>Molecular Weight</b>	Not available		
<b>Volatile Organic Compounds (As Regulated)</b>	20% Solution 1.0 WT%; 0.083 LB/US gal; 10.0 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg 100% Solution 5.0 WT%; 0.42 LB/US gal; 50.0 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg This product does not contain an ingredient that meets the definition of a 'Photochemically Reactive Solvent' as found in California's South Coast Air Quality Management District Rule 102 – Definition of Terms. Consult your state or local air district regulations for location specific information.		

## Section 10 - STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions of use. May react on contact with strong acids.

### Chemical Stability

Stable under normal temperatures and pressures.

### Possibility of Hazardous Reactions

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Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

## Conditions to Avoid

Avoid sparks or flame. Incompatible materials.

## Incompatible Materials

Reducing agents, oxidizers, acids.

## Hazardous decomposition products

Oxides of carbon, nitrogen oxides. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

## Thermal decomposition products

Carbon monoxide. Nitrogen oxides (NO<sub>x</sub>).

## Section 11 - TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Inhalation

May cause respiratory irritation.

#### Skin Contact

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

#### Eye Contact

Causes eye burns.

#### Ingestion

May cause digestive tract irritation.

#### 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

##### Carbonic acid, dipotassium salt (584-08-7)

Oral LD50 Rat 1870 mg/kg

##### Hexanoic acid, 3,5,5-trimethyl- (3302-10-1)

Oral LD50 Rat 1100 mg/kg; Dermal LD50 Rat >2000 mg/kg (no deaths occurred)

##### 2-Pyrrolidinone, 1-octyl- (2687-94-7)

Oral LD50 Rat 2050 mg/kg; Dermal LD50 Rabbit 2000 mg/kg

#### Product Toxicity Data

##### Acute Toxicity Estimate

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

#### Immediate Effects

Causes burns, eye burns, skin burns. May cause an allergic skin reaction.

#### Delayed Effects

Repeated or prolonged skin contact may cause dermatitis due to defatting of the skin. May cause damage to organs through prolonged or repeated exposure.

#### Irritation/Corrosivity Data

Causes burns. May cause digestive tract irritation. May cause respiratory irritation.

#### Respiratory Sensitization

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

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## Dermal Sensitization

May cause allergic skin reaction.

## Component Carcinogenicity

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

## Germ Cell Mutagenicity

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

Experimental evidence suggests that this product does not cause mutagenesis.

## Tumorigenic Data

No data available

## Reproductive Toxicity

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

## Specific Target Organ Toxicity - Single Exposure

No significant target effects reported.

## Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

## Aspiration hazard

Based on available data, the classification criteria are not met.

## 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

### Component Analysis - Aquatic Toxicity

Carbonic acid, dipotassium salt	584-08-7
Invertebrate:	LC50 48 h Ceriodaphnia dubia 630 mg/L EPA
2-Pyrrolidinone, 1-octyl-	2687-94-7
Fish:	LC50 96 h Danio rerio 12.8 - 44.8 mg/L [static ]

### Invertebrate Toxicity

No additional information is available.

### Persistence and Degradability

No information available for the product.

### Bioaccumulative Potential

No information available for the product.

### Mobility

No information available for the product.

## 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.

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

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

<b>Section 15 - REGULATORY INFORMATION</b>
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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:** Yes **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

**Alcohols, C9-11-branched and linear, butoxylated ethoxylated (111905-52-3)**

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	No	Yes	No

**Carbonic acid, dipotassium salt (584-08-7)**

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	Yes	Yes	Yes	Yes	Yes	Yes

### Hexanoic acid, 3,5,5-trimethyl- (3302-10-1)

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

### 2-Pyrrolidinone, 1-octyl- (2687-94-7)

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

### Poly(oxy-1,2-ethanediyl), .alpha.-[2-(tert-dodecylthio)ethyl]-.omega.-hydroxy- (9004-83-5)

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

## Section 16 - OTHER INFORMATION

#### NFPA Ratings

Health: 3 Fire: 0 Instability: 0

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

#### Summary of Changes

Regulatory review and update.

#### 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

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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 - 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 supplier to the user.