



Safety Data Sheet

Material Name: ARMAKLEEN M-301

SDS ID: 82849

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

ArmaKleen M-301

Product Code

6338, 6438

Formula Code 42000116

Synonyms

Not available.

Product Use

Aqueous, alkaline concentrated cleaner that is to be diluted with water for the cleaning of ferrous 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

SUPPLIER

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 200
Richardson, TX 75080
Phone: 1-800-669-5740
www.safety-kleen.com

IMPORTER/DISTRIBUTOR

Safety-Kleen Canada Inc.
25 Regan Road
Brampton, Ontario, Canada L1A 1B2
Phone: 1-800-669-5740

Emergency Telephone Number

Medical: 1-888-234-1828 Chemical: 1-800-424-9300 (CHEMTREC)

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March 6, 2017

Supersedes Issue Date

April 14, 2015

Original Issue Date

August 4, 1998

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

Corrosive to Metals - Category 1

Acute Toxicity - Oral - Category 4

Skin Corrosion/Irritation - Category 1A

Serious Eye Damage/Eye Irritation - Category 1

Health Hazard Not Otherwise Classified - Category 1.

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GHS Label Elements

Symbol(s)



Signal Word

Danger.

Hazard Statement(s)

May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Causes severe damage to the respiratory tract.

Precautionary Statement(s)

Prevention

Keep only in original packaging. Use only outdoors or in a well-ventilated area. Do not breathe gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response

Absorb spillage to prevent material damage. 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. Wash contaminated clothing before reuse. If irritation or rash develops: call a POISON CENTER or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Storage

Store in corrosive resistant container with a resistant inner liner. Store locked up. Do not store below 40°F.

Disposal

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

Statement(s) of Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

Other hazards

May cause digestive tract damage.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	73-80
1310-58-3	Potassium hydroxide	14-16
3302-10-1	Hexanoic acid, 3,5,5-trimethyl-	3.8-4.2
527-07-1	Sodium gluconate	1.9-2.1

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68987-81-5	Alcohols, C6-10, ethoxylated propoxylated	3.3-3.7
584-08-7	Carbonic acid, dipotassium salt	0.95-1.05
68439-46-3	Alcohols, C9-11, ethoxylated	2.4-2.6

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. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. If irritation or rash develops: Call a POISON CENTER or doctor/physician.

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

Harmful if swallowed. Causes skin burns, eye burns. Causes severe damage to the respiratory tract. May cause severe burns of the mouth, throat, and gastrointestinal tract.

Delayed

No information on significant adverse effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. Avoid gastric lavage.

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. May react violently with water at normal temperature and pressure.

Special Hazards Arising from the Chemical

Heated material may cause thermal burns. May be corrosive to metals. Reacts violently with acids. Exothermic reaction with combustible materials.

Hazardous Combustion Products

Burning may produce corrosive vapors.

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.

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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. Neutralize the spill with dilute acid to lower pH. 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 or 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

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. Do not store below 40°F.

Incompatible Materials

Strong acids, strong bases, strong oxidizers. Generates heat when diluted with water. May be corrosive to metals.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Potassium hydroxide	1310-58-3
Canada	2 mg/m ³ Ceiling
ACGIH	2 mg/m ³ Ceiling
NIOSH	2 mg/m ³ Ceiling

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.

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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.

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, lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear light straw colored liquid	Physical State	Liquid
Odor	Mild	Color	Clear , straw-colored
Odor Threshold	Not available	pH	13.8
Melting Point	32°F (0 °C)	Boiling Point	212 °F (100 °C)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	>212°F (100 °C)
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	1.15
Water Solubility	(complete)	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	Molecular Weight	Not available

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Volatile Organic Compounds (As regulated) 0 WT%; 0 LB/US gal; 0 g/L; As per 40 CFR Part 51.100(s)
Product Vapor Pressure @20°C = 17.5 mmHg
Product does not contain photochemically reactive solvents
Product does not contain any volatile organic compounds as defined per 40 CFR Part 51.100(s)

Section 10 - STABILITY AND REACTIVITY

Reactivity

May be corrosive to metals. Reacts violently with acids. Exothermic reaction with combustible materials.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

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

Conditions to Avoid

Avoid sparks or flame, direct sunlight, moisture, incompatible materials.

Incompatible Materials

Metals, water, acids, oxidizers, reducing agents, halogens.

Hazardous decomposition products

Corrosive vapors. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

Thermal decomposition products

Corrosive vapors.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

Causes severe damage to the respiratory tract.

Skin Contact

Causes burns.

Eye Contact

Causes eye burns.

Ingestion

Harmful if swallowed. May cause severe burns of the mouth, throat, and gastrointestinal tract.

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

Potassium hydroxide (1310-58-3)

Oral LD50 Rat 284 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)

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

Oral LD50 Rat 1870 mg/kg

Alcohols, C9-11, ethoxylated (68439-46-3)

Oral LD50 Rat 1400 mg/kg

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Product Toxicity Data

Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Oral	790.986 mg/kg

Immediate Effects

Harmful if swallowed. Causes burns, eye burns, skin burns. Causes severe damage to the respiratory tract.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

Causes burns. Causes severe damage to the respiratory tract.

Respiratory Sensitization

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

Dermal Sensitization

No information on significant adverse effects.

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

No significant target effects reported.

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

No ecotoxicity data are available for this product's components

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.

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Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

D002. 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:

Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contains Potassium Hydroxide)

Hazard Class: 8

UN/NA #: UN3266

Packing Group: II

Required Label(s): 8

IATA Information:

Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contains Potassium Hydroxide)

Hazard Class: 8

UN#: UN3266

Packing Group: II

Required Label(s): 8

TDG Information:

Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contain Potassium Hydroxide)

Hazard Class: 8

UN#: UN3266

Packing Group: II

Required Label(s): 8

Section 15 - REGULATORY INFORMATION

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

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.

Potassium hydroxide	1310-58-3
CERCLA:	1000 lb final RQ ; 454 kg final RQ

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

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

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Component Analysis - Inventory

Water (7732-18-5), Potassium hydroxide (1310-58-3), Hexanoic acid, 3,5,5-trimethyl- (3302-10-1), Sodium gluconate (527-07-1), Alcohols, C6-10, ethoxylated propoxylated (68987-81-5), Carbonic acid, dipotassium salt (584-08-7), Alcohols, C9-11, ethoxylated (68439-46-3)

US	CA
Yes	DSL

U.S. State Regulations

Potassium hydroxide (1310-58-3)

MA	NJ	PA
Yes	Yes	No

Not listed under California Proposition 65

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 3 Fire: 0 Reactivity: 1

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

Summary of Changes

Revision to comply with WHMIS 2015.

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; 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; NDSL - Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; RCRA - Resource Conservation and Recovery Act; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; WHMIS - Workplace Hazardous Materials Information System (Canada).

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 Product Regulations (HPR)

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.