## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Material Name</th>
<th>ArmaKleen M-RP Concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Code</strong></td>
<td>6342</td>
</tr>
<tr>
<td>Formula Code</td>
<td>42000134</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Product Use</strong></td>
<td>Aqueous, alkaline metal corrosion inhibitor. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.</td>
</tr>
<tr>
<td><strong>Restrictions on Use</strong></td>
<td>For professional use only.</td>
</tr>
</tbody>
</table>

### 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 |
- Safety-Kleen Systems, Inc.
- 2600 North Central Expressway
- Suite 200
- Richardson, TX 75080
- Phone: 1-800-669-5740
- [www.safety-kleen.com](http://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)

### Issue Date |
- March 6, 2017

### Supersedes Issue Date |
- April 11, 2015

### Original Issue Date |
- January 31, 1997

## 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

- **Acute Toxicity - Oral** - Category 4
- **Skin Corrosion/Irritation** - Category 1A
- **Serious Eye Damage/Eye Irritation** - Category 1
- **Skin Sensitization** - Category 1
- **Specific Target Organ Toxicity - Repeated Exposure** - Category 2
- **Health Hazard Not Otherwise Classified** - Category 1.
GHS Label Elements

Symbol(s)

Signal Word
Danger.

Hazard Statement(s)
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
Causes severe damage to the respiratory tract.

Precautionary Statement(s)
Prevention
Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Do not breathe mist/vapors/spray.

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

Storage
Store locked up. Do not store below 40ºF.

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

Statement(s) of Unknown Acute Toxicity
70.5% of the mixture consists of ingredient(s) of unknown acute toxicity.

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>60-67</td>
</tr>
<tr>
<td>584-08-7</td>
<td>Carbonic acid, dipotassium salt</td>
<td>11-13</td>
</tr>
<tr>
<td>1312-76-1</td>
<td>Potassium silicate</td>
<td>2.8-3.1</td>
</tr>
<tr>
<td>29385-43-1</td>
<td>Tolyl triazole</td>
<td>1.9-2.1</td>
</tr>
<tr>
<td>1310-58-3</td>
<td>Potassium hydroxide</td>
<td>3.0-3.3</td>
</tr>
</tbody>
</table>
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: Call a POISON CENTER or doctor/physician. 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. Immediately call a POISON CENTER or doctor/physician.

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 an allergic reaction. May cause irritation of digestive tract.

Delayed
May cause damage to organs through prolonged or repeated exposure.

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
Heated material may cause thermal burns.

Hazardous Combustion Products
Oxides of carbon, potassium, and phosphorus.

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.

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 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.

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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. Do not eat, drink or smoke when using this product. Heated material may cause thermal burns.

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

Acids, reducing agents, oxidizers.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
</tr>
<tr>
<td>Canada</td>
<td>2 mg/m3 Ceiling</td>
</tr>
<tr>
<td>ACGIH, NIOSH</td>
<td>2 mg/m3 Ceiling</td>
</tr>
</tbody>
</table>

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.

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.

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### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear to hazy light brown liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Mild</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>0 ºC (32ºF)</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>100 ºC (212ºF)</td>
</tr>
<tr>
<td><strong>Boiling Point Range</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Lower Explosive Limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Upper Explosive Limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Density (air=1)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>(complete )</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (As regulated)</strong></td>
<td>0 WT%; 0 LB/US gal; 0 g/L; As per 40 CFR Part 51.100(s)</td>
</tr>
</tbody>
</table>

**Product Vapor Pressure @20ºC = 17.5 mmHg**

Product does not contain photochemically reactive solvents

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### Section 10 - STABILITY AND REACTIVITY

**Reactivity**

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

**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
   Acids, reducing agents, oxidizers.

Hazardous decomposition products
   Oxides of carbon, potassium, and phosphorus. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

Thermal decomposition products
   Oxides of carbon, potassium, and phosphorus.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
   Causes severe damage to the respiratory tract.

Skin Contact
   Causes burns. May cause an allergic skin reaction.

Eye Contact
   Causes eye burns.

Ingestion
   Harmful if swallowed. May cause irritation of digestive 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:
   Carbonic acid, dipotassium salt (584-08-7)
      Oral LD50 Rat 1870 mg/kg
   Potassium silicate (1312-76-1)
      Oral LD50 Rat 5700 mg/kg
   Tolyl triazole (29385-43-1)
      Oral LD50 Rat 675 mg/kg
   Potassium hydroxide (1310-58-3)
      Oral LD50 Rat 284 mg/kg

Product Toxicity Data

Acute Toxicity Estimate

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>885.127 mg/kg</td>
</tr>
</tbody>
</table>

Immediate Effects
   Harmful if swallowed. Causes burns, eye burns, skin burns. Causes severe damage to the respiratory tract.
   May cause an allergic reaction. May cause irritation of digestive tract.

Delayed Effects
   May cause damage to organs through prolonged or repeated exposure.

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
   May cause an allergic 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
No information on significant adverse effects.

Specific Target Organ Toxicity - Single Exposure
No target organs identified.

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

<table>
<thead>
<tr>
<th>Potassium silicate</th>
<th>1312-76-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish:</td>
<td>LC50 96 h Lepomis macrochirus 301 - 478 mg/L; LC50 96 h Brachydanio rerio 3185 mg/L [semi-static ]</td>
</tr>
</tbody>
</table>

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
The U.S. EPA has not published waste numbers for this product’s components. 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

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.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
</tr>
<tr>
<td>CERCLA:</td>
<td></td>
</tr>
<tr>
<td>1000 lb final RQ ; 454 kg final RQ</td>
<td></td>
</tr>
</tbody>
</table>

SARA Section 311/312 (40 CFR 370 Subparts B and C)
Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No Reactivity: No
Component Analysis - Inventory
Carbonic acid, dipotassium salt (584-08-7), Potassium silicate (1312-76-1), Tolyl triazole (29385-43-1), Potassium hydroxide (1310-58-3), Acetic acid, hydroxyphosphono- (23783-26-8)

<table>
<thead>
<tr>
<th>Country</th>
<th>CA</th>
<th>DSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not listed under California Proposition 65.

Section 16 - OTHER INFORMATION

NFPA Ratings
Health: 1 Fire: 0 Reactivity: 0
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
Safety Data Sheet

Material Name: ArmaKleen M-RP Concentrate


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.