

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Armakleen™ Rust Remover

Intended Use of the Product

Aqueous, acidic concentrated rust remover and cleaner that is to be diluted with water before use. For professional use only.

Name, Address, and Telephone of the Responsible Party

Manufacturer

Church & Dwight
The ArmaKleen™ Company
469 North Harrison Street
Princeton, NJ 08543 USA
T (800) 332-5424
www.churchdwight.com

Supplier

Safety-Kleen Systems, Inc.
2600 North Central Expressway, Suite 200
Richardson, TX 75080 USA
T (800) 669-5740

Emergency Telephone Number

Emergency Number : For Medical Emergency: 1-888-234-1828, For Chemical Emergency: 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290
Acute Tox. 4 (Oral) H302
Skin Corr. 1A H314
Eye Dam. 1 H318

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

Precautionary Statements (GHS-US)

: P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, spray.
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.
P301+P330+P331+P312 - **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. Immediately call POISON CENTER/doctor.
P303+P361+P353+P363 - **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304+P340 - **IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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P305+P351+P338 - **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.

P390 - Absorb spillage to prevent material damage.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Harmful to aquatic life.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)
Phosphoric acid	(CAS No) 7664-38-2	60 - 100
Alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	1 - 5
1-Dodecanamine, N,N-dimethyl-, N-oxide	(CAS No) 1643-20-5	1 - 5
2-Pyrrolidinone, 1-octyl-	(CAS No) 2687-94-7	0.1 - 1

A range of concentration as prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition.

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with plenty of water. Wash contaminated clothing before reuse.

Eye Contact: 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: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Corrosive. Causes burns.

Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Skin Contact: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: May be harmful or fatal if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: Prolonged or repeated inhalation may cause burns to mucous membranes. Eye contact, if not treated immediately, may result in burns and permanent damage. Prolonged or repeated skin contact may cause drying, cracking, redness, itching, swelling (dermatitis), and/or burns.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Thermal decomposition generates: Corrosive vapors.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

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Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Potassium oxides. Carbon oxides (CO, CO₂).

Reference to Other Sections

Refer to section 9 for flammability properties. Refer to section 16 for NFPA information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all unnecessary exposure. Do not breathe vapor, mist or spray. Do not allow product to spread into the environment. Spilled material may present a slipping hazard.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions Avoid release to the environment. Contact competent authorities after a spill.

Methods and Material for Containment and Cleaning Up

For Containment: Stop leak if safe to do so. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Take up liquid spill into absorbent material or Neutralize with sodium bicarbonate.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. Always add acid to water. Do NOT add water to acid!

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Container remains hazardous when empty. Continue to observe all precautions.

Storage Conditions: Store in a dry, cool and well-ventilated place. Store in original container or corrosive resistant and/or lined container. Keep container tightly closed.

Incompatible Materials: Strong bases. Strong oxidizers. Reducing agents. Halogens. Metals.

Specific End Use(s) Rust remover, cleaner. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Phosphoric acid (7664-38-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
USA ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	3 mg/m ³
USA IDLH	US IDLH (mg/m ³)	1000 mg/m ³
CANADA	OEL STEL (mg/m ³)	3 mg/m ³
CANADA	OEL TWA (mg/m ³)	1 mg/m ³

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Exposure Controls

Appropriate Engineering Controls: Not generally required. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Materials for Protective Clothing: As required: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Safety glasses with side shields, or goggles, are recommended.

Skin and Body Protection: Wash contaminated clothing before reuse.

Respiratory Protection: If irritation is experienced, approved respiratory protection should be worn.

Thermal Hazard Protection: If material is hot, wear thermally resistant protective gloves.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear, light straw
Odor	: Mild detergent
Odor Threshold	: Not available
pH	: < 1
Evaporation Rate	: Not available
Melting Point	: 0 °C (32 °F)
Freezing Point	: Not available
Boiling Point	: 100 °C (212 °F)
Flash Point	: > 100 °C (212 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 1.43
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react violently with water and cause splattering. May react violently with alkalis.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Reducing agents. Halogens.

Hazardous Decomposition Products: Thermal decomposition generates: Corrosive vapors. Carbon oxides. Phosphorus oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Oral: Harmful if swallowed.

LD50 and LC50 Data:

Armakleen™ Rust Remover	
ATE US (oral)	1,717.86 mg/kg body weight

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. (pH: < 1)

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Serious Eye Damage/Irritation: Causes serious eye damage. (pH: < 1)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Skin Contact: Causes severe skin burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Swallowing a small quantity of this material will result in serious health hazard. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2740 mg/kg
LC50 Inhalation Rat	> 850 mg/m ³ (Exposure time: 1 h)
Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 Oral Rat	1400 mg/kg
LD50 Dermal Rat	> 2 g/kg
2-Pyrrolidinone, 1-octyl- (2687-94-7)	
LD50 Oral Rat	2050 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life.

1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)	
ErC50 (algae)	0.11 mg/l (72 hour)

Persistence and Degradability Not established

Bioaccumulative Potential Not established

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Container remains hazardous when empty. Continue to observe all precautions.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

EPA Hazardous Waste Code: D002 (Corrosive).

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT

Proper Shipping Name	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Phosphoric Acid)
Hazard Class	: 8
Identification Number	: UN3264
Label Codes	: 8
Packing Group	: II
ERG Number	: 154



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In Accordance with IMDG

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Phosphoric Acid)
Hazard Class : 8
Identification Number : UN3264
Packing Group : II
Label Codes : 8
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B



In Accordance with IATA

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Phosphoric Acid)
Packing Group : II
Identification Number : UN3264
Hazard Class : 8
Label Codes : 8
ERG Code (IATA) : 8L



In Accordance with TDG

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Phosphoric Acid)
Packing Group : II
Hazard Class : 8
Identification Number : UN3264
Label Codes : 8



SECTION 15: REGULATORY INFORMATION

US Federal & International Regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Phosphoric Acid (7664-38-2)	
Regional Legislation Listed on the Canadian DSL (Domestic Substances List) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the Canadian IDL (Ingredient Disclosure List), Disclosure at 1 %	
Alcohols, C9-11, Ethoxylated (68439-46-3)	
Regional Legislation Listed on the Canadian DSL (Domestic Substances List) Listed on the United States TSCA (Toxic Substances Control Act) inventory	
1-Dodecanamine, N,N-Dimethyl-, N-Oxide (1643-20-5)	
Regional Legislation Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
2-Pyrrolidinone, 1-Octyl- (2687-94-7)	
Regional Legislation Listed on the Canadian DSL (Domestic Substances List) Listed on the United States TSCA (Toxic Substances Control Act) inventory	

VOLATILE ORGANIC COMPOUNDS (AS REGULATED):

3.28 WT%; .39 LB/US gallon; 47 g/L As per 40 CFR Part 51.100(s)

Product Vapor Pressure @20°C = 11 mmHg

Product does not contain photochemically reactive solvents

US State Regulations

Phosphoric acid (7664-38-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

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U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

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WHMIS Classification Class E - Corrosive Material



Phosphoric acid (7664-38-2)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Class E - Corrosive Material

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

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Class E - Corrosive Material
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Class E - Corrosive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 05/11/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

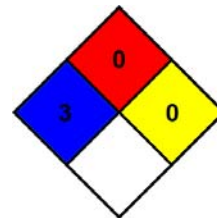
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects

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- NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
- NFPA fire hazard : 0 - Materials that will not burn.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Party Responsible for the Preparation of This Document

Church & Dwight
500 Charles Ewing Blvd
Ewing Township, NJ 08628
T 800-332-5424

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