Safety Data Sheet
SCALE REMOVING COMPOUND

Section 1 - Chemical Product and Company Identification

Supplier's Information:

Alfakleen Chemical Labs.
1315 Corte Maltera
Costa Mesa, CA 92626
Phone: (714) 884-3580
Fax: (909) 242-1550

Product Name: Scale Removing Compound

Product Code: AK - 043

Date of Issue: October 27, 2016

Use Dilution Information: 3- 6 oz. per Gallon; Ratio: 20 - 30 Parts Water to 1 Part Product

Section 2 - Hazard Identification

Product as a Concentrate

GHS Overview:

Eye Corrosive, Corrosive to Gastrointestinal Tract, Skin Corrosive.

GHS Label Elements:

Signal Word: Danger

Symbol:



Hazard Statements:

Causes Skin Irritation/Damage
Causes Eye Irritation/Damage
May Cause Respiratory Irritation

Precautionary Statements

Prevention: Wear protective gloves. Wear eye or full face protection. Wear protective clothing. Wash hands thoroughly after handling.

Response:

Skin Contact: If skin comes in contact with product: Flush exposed area with cool water for 15 minutes. Consult a physician if irritation develops or persists. **Eye Contact:** If this product comes in contact with eyes, flush eyes with luke warm water for 30 minutes and consult a physician if irritation develops or persists. **If Swallowed:** Have patient drink large amounts of milk or plain water. **DO NOT INDUCE VOMITING.** Consult a physician immediately. **If Inhaled:** Remove to clean atmosphere and consult physician immediately.

Storage: No specific restriction identified.

Disposal: See Section 13 for waste disposal info.

Other Hazards: None known.

Product at Use Dilution

GHS Overview:

Eye Severe Irritant, Severe Irritant to Gastrointestinal Tract, Skin Irritant

GHS Label Elements:

Signal Word: Danger

Symbol:



Hazard Statements:

May Cause Skin Irritation
May Cause Eye Irritation

Precautionary Statements

Prevention: Wear protective gloves. Wear eye or full face protection. Wear protective clothing. Wash hands thoroughly after handling.

Response:

Skin Contact: If skin comes in contact with product: Flush exposed area with cool water for 15 minutes. Consult a physician if irritation develops or persists. **Eye Contact:** If this product comes in contact with eyes, flush eyes with luke warm water for 30 minutes and consult a physician if irritation develops or persists. **If Swallowed:** Have patient drink large amounts of milk or plain water. **DO NOT INDUCE VOMITING.** Consult a physician immediately. **If Inhaled:** Remove to clean atmosphere and consult physician immediately.

Storage: No specific restriction identified.

Disposal: See Section 13 for waste disposal info.

Other Hazards: None known.

Section 3 - Composition / Information on Ingredients

Product as a Concentrate

Hazardous Ingredients	Concentration Range	CAS Number
Phosphoric Acid	40 - 65 %	7664 - 38 - 4

Product at Use Dilution

Hazardous Ingredients	Concentration Range	CAS Number
Phosphoric Acid	>1 %	7664 - 38 - 4

Section 4 - First Aid Procedures

Product as a Concentrate:

Skin Contact: If skin comes in contact with product: Flush exposed area with cool water for 15 minutes. Consult a physician if irritation persists.

Eye Contact: If this product comes in contact with eyes, flush eyes with luke warm water for 30 minutes and consult a physician if irritation persists.

Ingestion: DO NOT INDUCE VOMITING. Have patient drink large amounts of milk or plain water. Consult a physician immediately.

Inhalation: Remove to clean atmosphere and consult physician immediately

Product at Use Dilutions:

Skin Contact: If skin comes in contact with product: Flush exposed area with cool water for 15 minutes. Consult a physician if irritation persists.

Eye Contact: If this product comes in contact with eyes, flush eyes with luke warm water for 30 minutes and consult a physician if irritation persists.

Ingestion: DO NOT INDUCE VOMITING. Have patient drink large amounts of milk or plain water. Consult a physician immediately.

Inhalation: Remove to clean atmosphere and consult physician immediately.

Protection of First Responders:

No action shall be taken involving personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth to mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Note to Physician:

Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled.

Section 5 - Fire Fighting Information

Product as a Concentrate:

Suitable Fire Extinguishing Media: Use water spray, fog, or foam.

Specific Fire Hazards: In a fire or if heated, pressure increase may occur and the container may burst.

Hazardous Thermal Decompostion Products: None known.

Specific Fire - Fighting Methods: Promptly isolate the scene by removing all persons from the area if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with full-face piece operated in positive pressure mode.

Section 6 - Accidental Spill Procedures

Product as a Concentrate:
Personal Precautions: Initiate company's spill response procedures immediately. Keep people out of the area. Put on appropriate personal protective equipment (See Section 8). Do not touch or walk through spilled material.

Environmental Precautions: Avoid contact with spilled material and prevent runoff contact with soil and surface waterways.

Methods for Cleaning Up: Follow company's spill response procedures. Keep people away from spill area. Put on appropriate personal protective equipment (See Section 8). Absorb / Neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a water rinse for a final clean-up.

Product at Use Dilution:
Personal Precautions: Initiate company's spill response procedures immediately. Keep people out of the area. Put on appropriate personal protective equipment (See Section 8). Do not touch or walk through spilled material.

Environmental Precautions: Avoid contact with spilled material and prevent runoff contact with soil and surface waterways.

Methods for Cleaning Up: Follow company's spill response procedures. Keep people away from spill area. Put on appropriate personal protective equipment (See Section 8). Absorb / Neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a water rinse for a final clean-up.

Section 7 - Handling and Storage

Product as a Concentrate
Handling: Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes. Use only in adequately ventilated areas. Wash thoroughly after handling.

Storage: Keep out of the reach of children. Keep container tightly closed. Store between the following temperatures: -25oC and 40oC.

Product at Use Dilution
Handling: Do not get in eyes, on skin, or on clothing. Do not breathe vapor or fumes. Use only in adequately ventilated areas. Wash thoroughly after handling.

Storage: Keep out of the reach of children. Keep container tightly closed.

Section 8 - Exposure Controls / Personal Protection

Control Parameters:

Ingredients Name	Exposure Limits
Phosphoric Acid	**ACGIH TLV:** 1 mg/m3 **NIOSH TWA:** 1 mg/m3

Appropriate Engineering Controls: Use only in adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section 8 - Exposure Controls / Personal Protection

Eye Protection: Use chemical splash goggles. For continued or severe exposure wear a face shield over goggles.
Hand Protection: Use chemical resistant, impervious gloves.
Skin Protection: Use synthetic apron, other protective equipment as necessary to prevent skin contact.
Respiratory Protection: A respirator is not needed under normal and intended conditions of product use.
Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using lavatory and at the end of working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Section 9 - Physical and Chemical Properties

Product as a Concentrate:
Physical State: Liquid
Color: Clear
Odor: Acidic
pH: <1.0
Flash Point: None
Explosion Limits: None
Flammability: Will not burn or support combustion
Melting Point: Not Applicable
Boiling Point: >100°C (212°F)
Evaporation Rate: Not Determined
Vapor Pressure: Not Determined
Vapor Density: Not Determined
Specific Gravity: 1.22 +/- 0.02
Solubility: Easily soluble in either cold or hot water
Viscosity: Same as water

Section 10 - Stability and Reactivity

Product as a Concentrate
Stability: This product is stable.
Possibility of Hazardous Reactions: Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to Avoid: None
Materials to Avoid: Extremely reactive or incompatible materials such as acids.
Reactive or incompatible with the following materials: Oxidizers.
Slightly reactive or incompatible with the following materials: Metals.
Hazardous Decomposition Products: Under normal conditions of storage and use hazardous decomposition shall not occur.

Section 10 - Toxicological Information (cont.)

Routes of Exposure: Skin Contact, Eye Contact, Inhalation, Ingestion.

Product as a Concentrate
Symptoms
Skin Contact: Adverse symptoms may include the following: Pain or irritation, redness, rash. Blistering may occur.
Eye Contact: Adverse symptoms may include the following: Pain or irritation, redness, watering.
Inhalation: Adverse symptoms may include the following: Coughing, respiratory tract irritation.
Ingestion: Adverse symptoms may include the following: Stomach pains, diarrhea.

Product at Use Dilutions
Symptoms
Skin Contact: Adverse symptoms may include the following: Pain or irritation, redness, rash. Blistering may occur.
Eye Contact: Adverse symptoms may include the following: Pain or irritation, redness, watering.
Inhalation: Adverse symptoms may include the following: Coughing, respiratory tract irritation.
Ingestion: Adverse symptoms may include the following: Stomach pains, diarrhea.

Acute Toxicity
Skin Contact: Causes damage / irritation.
Eye Contact: Causes damage / irritation.
Inhalation: Can cause slight respiratory irritation.
Ingestion: Causes burns to the mouth, throat and stomach.

Toxicity Data
Product / Ingredient Name
Not Applicable

Chronic Toxicity
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.

Section 11 - Ecological Information

Product as a Concentrate
Ecotoxicity: This material is harmful to aquatic life.

Aquatic and Terrestrial Toxicity

Product / Ingredient Name	Results	Species	Exposure
Phosphoric Acid	Acute LC50 - 138 mg/l	Mosquito Fish	96 Hours
	Acute LC50 - 1689 mg/kg	Rat	1 Hours

Other Adverse Effects: No known significant effects or critical hazards.

Section 13 - Disposal Methods & Considerations

Product as a Concentrate
Disposal Methods: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with all local, State, and Federal regulations.
RCRA Classification: None

Section 14 - Transportation Information

Note: Certain shipping modes or packaging sizes may have exceptions from the transportation regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or packaging sizes.

DOT (U.S. Department of Transportation)
DOT Classification: Corrosive Liquid
DOT Proper Shipping Name: UN1805, Phosphoric Acid Solution
Shipping Class: 8
Packaging Group: III

IMO / IMDG
IMO / IMDG Classification: Corrosive Liquid
IMO / IMDG Proper Shipping Name: UN1805, Phosphoric Acid Solution
Shipping Class: 8
Packaging Group: III

Section 15 - Regulatory Information

Product as a Concentrate
U.S. Federal Regulations
TSCA 8(b) Inventory: All components are listed or exempt.
SARA 302/304/311/312 Extremely Hazardous Substances: No Listed Substances.
SARA 313 Product Names CAS Number Concentration:
No Listed Substances.
California Prop. 65
No Listed Substances.

Section 16 - Other Information

Hazardous Material Information System (U.S.A.)

NFPA RATING
0 = Non-Hazardous
I = Slight Hazard
2 = Hazardous
3 = Extreme Hazard
4 = Deadly



National Fire Protection Association (U.S.A.)

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL	D

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Prepared By: Stewart Holyk

Note to Reader:
This above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.