

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Material Identification: MicroKleen™ Phosphoric Acid Etch & Clean PLC-35			
Adsil, Inc. 1901 Mason Avenue, Suite 101 Daytona Beach, FL 32117	386-274-1382 Phone 386-274-1798 FAX CHEMTREC: 1-800-424-9300		
SECTION 2: OSHA HAZARDOUS COMPONENTS			
<u>C.A.S. Number(s)</u>	<u>Wt%</u>	<u>Components</u>	<u>Exposure Limits</u>
7664-38-2	>45%	Phosphoric Acid	ACGIH TLV-TWA: 1mg/m3 ACGIH TLV/STEL: 3mg/m3
68412-54-4	<3%	Nonylphenoxypolethoxyethanol	Not Established
NFPA/HMIS Code: Health 3, Flammability 0, Reactivity 1			
SECTION 3: PHYSICAL DATA FOR MATERIAL			
<p>pH: 1.0 (at a concentration of 100%)</p> <p>Solubility in water: Complete</p> <p>Appearance: Clear Liquid</p> <p>Odor: Odorless – no added fragrances</p> <p>Specific Gravity: 1.3 (approximate)</p> <p>Vapor Pressure: low</p> <p>VOC Content: N/A</p>			
SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL			
<p>Flash Point: N/A</p> <p>Fire & Explosion Hazards: Phosphoric acid solutions are non-combustible, however, contact with metals can result in the generation of hydrogen, giving rise to potentially flammable and explosive mixtures. Thermal decomposition from fires may produce irritating and poisonous gases. Contact with common metals may release flammable hydrogen gas. Use water spray to keep containers cool and to flush any spillage away from metals and fire.</p> <p>Extinguishing Media: If involved in a fire, use water spray. Avoid spraying into containers. If only a small amount of combustibles are present, smother fire with dry chemical. All standard agents are acceptable.</p> <p>Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus.</p>			
SECTION 5: HEALTH & HAZARD DATA			
<p>Signs & Symptoms of Exposure: DANGER – CAUSES EYE & SKIN BURNS. Contact will cause severe burns, which may result in blindness. Prolonged contact with skin will cause burns. If swallowed, it will cause burns to mouth, stomach and digestive tract. Also nausea, vomiting possible, circulatory shock and/or loss of consciousness. Can be fatal.</p> <p>Eye Contact: Contact with the eyes will cause severe burns and/or blindness. Brief contact may cause reversible redness, swelling and mucous discharge. Prolonged contact may cause burns and damage to corneas.</p> <p>Skin Contact: Contact with the skin or mucous will cause chemical burns.</p> <p>Inhalation: Inhalation of mists or spray may cause burns to the nose, throat and respiratory tract, possibly resulting in nausea, vomiting, possible circulatory shock and loss of consciousness.</p>			

Ingestion: Ingestion will cause burns to the mouth, throat, esophagus and stomach. Immediate pain will be experienced to exposed mucous membranes. In severe poisoning, mucous membranes may become necrotic, appearing grayish-white or black. Nausea, vomiting and gastric hemorrhage may occur. Severe cases may progress to ulceration of membranes, circulatory collapse with clammy skin, weak and rapid pulse, shallow respiration and scanty urine. A major hazard of ingestion is from aspiration (breathing) of liquid into the lungs, particularly from vomiting. May be fatal.

Chronic/Carcinogenic Effects: Product Carcinogenic – NTP: No; IARC: No; OSHA: No; ACGIH: No

Conditions Aggravated by Exposure: Pre-existing respiratory conditions & skin conditions such as dermatitis.

Conditions Aggravated by Overexposure: Irritation from skin exposure may aggravate existing open wounds, skin disorders & dermatitis conditions.

SECTION 6: FIRST AID MEASURES

Eyes: In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure adequate flushing. Get immediate medical attention. Speed in treatment can prevent serious eye damage. If wearing contact lenses, remove them immediately.

Skin: Remove contaminated clothing immediately. Wash hands thoroughly with soap and water after use or contact. See a physician if redness, irritation or burns occur. Launder clothes before reuse.

Inhalation: In case of inhalation, move person to fresh air at once and call a physician. Keep person quiet. If person is not breathing, ensure that the airway is open and administer CPR. If necessary, provide additional air or oxygen once breathing is restored. Seek medical care.

Ingestion: DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION OF LIQUID INTO LUNGS. Seek immediate medical attention. Rinse mouth with water. Administer 1 or 2 glasses of water to drink. Never administer liquids to an unconscious person. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Get immediate medical attention. Monitor for breathing difficulty.

SECTION 7: REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Heat.

Materials to Avoid: May react with strong alkalis and most metals. Phosphoric acid may react with common metals, such as mild steel and aluminum, liberating flammable hydrogen gas. Phosphoric acid also reacts with alcohols, glycols, aldehydes, amides, carbamates, esters, ketones, phenols, cresols, organophosphates, epoxides and organic peroxides.

SECTION 8: LEAK OR SPILL INFORMATION

Containment/Clean-up: Ventilate area of spill or leak. Dike area ahead of spill to prevent entry into sewers or waterways. Absorb or neutralize with suitable material, such as dry earth or sand. Collect and place in suitable, labeled waste container. Rinse spill residue with water. Residue can be neutralized with soda ash.

SECTION 9: SPECIAL PROTECTION INFORMATION

Respiratory Protection: When respirators are required, select NIOSH/MSHA approved equipment, based on actual or potential airborne concentrations and in accordance with the latest OSHA Standard 29 CFR 1910.134 and/or ANSI Z88.2 recommendations.

Gloves: Wear neoprene chemical resistant gloves, rubber boots and apron.

Eye Protection: Wear safety goggles or face shield to prevent accidental eye contact.

Engineering Controls: Use with adequate general and local exhaust ventilation to prevent vapor buildup above the exposure limits of the ingredients. If misting or spraying can occur, local exhaust ventilation should be used.

SECTION 10: TRANSPORT INFORMATION

DOT Information (49 CFR 172.101)

Proper Shipping Name: CORROSIVE LIQUID, INORGANIC, n.o.s.

Hazard Technical Name: PHOSPHORIC ACID

Hazard Class: 8

UN Number: UN3264

Packing Group: III

SECTION 11: HANDLING & STORAGE

Handling & Storage: Store in a cool, dry area. Separate from alkalis, oxidizers and metals.

Work/Hygienic Practices: Use good personal hygiene. Wash hands and exposed skin with soap and water after handling. Launder contaminated clothing before reuse. Do not consume food, drink or tobacco products in areas where they may be contaminated by this material.

SECTION 12: REGULATORY INFORMATION

EPA SARA Title III Chemical Listings: PHOSPHORIC ACID

Section 302 CERCLA Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances: None

Section 312 Hazard Class:

- Acute: Yes
- Chronic: Yes
- Fire: No
- Pressure: No
- Reactive: No

Section 313 Toxic Chemicals:

<u>C.A.S. Number</u>	<u>Wt%</u>	<u>Component Name</u>
7664-38-2	>45%	Phosphoric Acid

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

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Prepared by: Adsil MSDS Coordinator
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