

Safety Data Sheet

Etch Gel

SDS DATE: 04/15/13

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Green Etch Liquid

Other Names: S-Chem-063, Etchant Liquid Green

Proper Shipping Name: Phosphoric Acid Solution

Product Use: To be used on enamel surfaces to roughen the surface in dental procedures.

Supplier:

Company: Henry Schein, Inc.
135 Duryea Road
Melville, NY 11747 USA
Henry Schein U.K. Holdings Ltd.
Gillingham ME8 OSB U.K.
Telephone: (800) 472-4346

Emergency Information Chemtrec:

(800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview

Warning: OVER EXPOSURE TO PHOSPHORIC ACID CAN HAVE SEVERE EFFECTS!
USE CAUTION WITH ANY SUCH PRODUCTS

Routes of Entry:

Inhalation, Skin, Eye, Ingestion

Potential Health Acute Effects:

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Eyes:

Very hazardous and severe irritation to the eyes including but not limited to blurred vision, watering and discomfort.

Skin:

Contact with skin may cause severe irritation and reactions, such as scaling and/ or blisters.

Inhalation:

Irritation may occur. Exposure can cause severe irritation and damage to the respiratory tract, causing coughing, choking, and/ or shortness of breath.

Ingestion:

Possible irritation and/or tissue damage with ingestion including but not limited to the mouth, esophagus, respiratory and digestive tracts.

Potential Chronic Health Effects:

Prolonged or overexposure to Phosphoric Acid can cause organ damage and/ or death.

Carcinogenicity:

None of the components were listed by IARC as carcinogens.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT:	CAS NUMBER:	WT/WT %:
Phosphoric Acid	7664-38-2	25.0 – 50.0
Polyvinyl Alcohol	25213-24-5	1.0 – 15.0
Proprietary	Proprietary	Proprietary

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SECTION 4: FIRST AID MEASURES

Eyes:

Flush with copious amounts of water for at least 15 minutes. Seek medical attention immediately.

Skin:

If irritation occurs and product is on the skin, rinse thoroughly with water for at least 15 minutes. Remove any contaminated clothing. An emollient may be applied to the affected area. If irritation, redness or swelling persists, contact a physician immediately.

For more serious skin contact, such as blistering, rinse the affected area with cold water and seek medical attention immediately.

Ingestion:

If ingested, do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Seek medical attention immediately.

Inhalation:

Immediately seek fresh air. Open windows and/or doors to increase ventilation. Seek immediate medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable/Explosive Limits:

ND

Flash Point:

Not flammable.

Method Used:

No information.

Autoignition Temperature:

ND

Sensitive to Mechanical Impact:

No.

Sensitive to Static Discharge:

No.

Extinguishing Media:

Chemical Foam, CO₂, Dry Chemical Powder, Water Spray. NOTE: Water may be ineffective in extinguishing the fire.

Special Fire Fighting Measures:

Phosphoric Acid: Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans, and sulfides.

Do not enter fire area without proper protection. Fight fire from a safe location. Heat/ impurities may cause pressure to build and/or closed containers, spreading fire, increasing risk of burns/injuries. Structural firefighters must wear SCBAs and full protective equipment. Thermal decomposition emits toxic fumes of oxides of phosphorus.

Unusual Fire and Explosion Hazards:

Phosphoric Acid: Mixtures with nitromethane are explosive.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Process for cleaning and take-up:

Evacuate the spill area. Maximize ventilation by opening doors and windows.

For larger spills: use self-contained breathing apparatus and protective clothing, (e.g. goggles and gloves). Dike and absorb or contain the spill with an inert material, such as sand. The spill can be neutralized with sodium bicarbonate and calcium hydroxide. Use non-sparking tools ONLY and dispose of the material in the proper closed container(s). Wash all affected areas of the skin with warm water and soap. Remove clothing that has been contaminated and wash thoroughly.

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For small spills: Cover with sodium carbonate and calcium hydroxide and absorb the spill with the proper media. Place waste in an approved container.
Wash all affected areas of the skin with warm water and soap. Remove clothing that has been contaminated and wash thoroughly.

Environmental Precautions:

Keep spills and cleaning runoffs out of sewers and open bodies of water. Spills on porous surfaces can contaminate the ground water. Dispose of in accordance with Federal, State and Local regulations, or appropriate governing standards.

SECTION 7: HANDLING AND STORAGE

Handling:

Handling advice:

To be handled by qualified dental professionals.
Follow instructions for use.
After each use, wash hands or exposed skin thoroughly. Do not smoke, eat or drink while using this product.

Fire and explosion protection:

Store in a cool dry place away from heat, sparks, flame and direct sunlight. Close container after each use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Chemical Name:	CAS NUMBER:	Exposure Limits in Air:		
		OSHA-PELs	ACGIH-TLVs	STEL
Phosphoric Acid	7664-38-2	1 mg/m ³	1 mg/m ³	3 mg/ m ³
Polyvinyl Alcohol	25213-24-5	NE	NE	NE
Proprietary	Proprietary	NE	NE	NE

Engineering Controls:

Ventilation:

Professional: Follow precautions and directions on label. Use in a well ventilated area. Open windows and doors if necessary.

Personal Protection:

Respiratory Protection:

A respirator should be worn whenever workplace conditions warrant its' use. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR § 1910.134 or other appropriate governing standard.

Hand Protection:

Chemical resistant gloves should be worn when prolonged or repeated skin contact is expected. If necessary, refer to U.S. OSHA 29 CFR § 1910.138, or other appropriate governing standard. Eye wash stations, safety showers or sink basins are recommended.

Eye Protection:

Safety glasses or chemical splash goggles may be worn, if necessary refer to U.S. OSHA 29 § 1910.133 or other appropriate governing standard. Eye wash stations, safety showers or sink basins are recommended.

Other:

No special body protection is required; refer to appropriate governing standard(s).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

General description:

State: Liquid
Odor: No Obvious Odor
Color(s): Green

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Chemical Properties:

<u>Designation:</u>	<u>Value:</u>
Vapor Pressure	ND
Boiling Point Freezing Point	ND ND
Solubility in Water	Soluble
Viscosity	ND
Specific Gravity (H ₂ O = 1)	1.3 g/cc at 25° C/ 77° F
Percent Volatile W/W%	ND
Vapor Density (AIR = 1)	>1
Evaporation Rate (BuAc = 1)	<1

SECTION 10: STABILITY AND REACTIVITY

Stability:

This material is stable.

Reactivity:

Hazardous Decomposition Products: Oxides of carbon and phosphorus when burned.

Incompatibility: Heat and ignition sources, aging and contamination. Reactive metals and bases.

Other: Avoid high temperatures, localized heat sources, freezing conditions, direct sunlight, and ultraviolet radiation, desiccation.

SECTION 11: TOXICOLOGICAL INFORMATION

General toxicological information:

Phosphoric Acid: Organs, Blood, Skin, Eyes, Bone Marrow

Silicon Dioxide: None reported.

For proprietary: None listed.

Toxicity Data:

Phosphoric Acid:		
Oral (Rat)	LD ₅₀ :	1530 mg/kg
Dermal (Rabbit)	LD ₅₀ :	2740 mg/kg
Polyvinyl Alcohol:		
Oral (Rat)	LD ₅₀ :	>5000 mg/kg
Inhalation (Rat)	LD ₅₀ :	>20.0 mg/L/1h
Dermal (Rabbit)	LD ₅₀ :	>1000 mg/kg
Eyes (Rabbit)		Slightly irritating with subsiding effects after 48 hours of exposure

SECTION 12: ECOLOGICAL INFORMATION

General ecological information:

Aquatic toxicity is possible, including physical damage or death to aquatic life; do not discharge into drains or the environment.

Phosphoric Acid:		
TLm Mosquito Fish	NE	138 mg/L/24 - 96H

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Polyvinyl Alcohol: NE

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal of product:

Do not reuse empty drums or containers due to potential hazards. Dispose of all empty containers according to Federal, State, and Local or appropriate governing regulations.

SECTION 14: TRANSPORT INFORMATION

Proper shipping name: Phosphoric Acid Solution

Hazard class or division: Class 8

Identification number (UN): 1805

Packing group: III

The transport information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

SECTION 15: REGULATORY INFORMATION

Symbols of Danger:

Corrosive

R-Phrase:

R34 – Causes burns

R22 – Harmful if swallowed.

S-Phrase:

S36/39 – Wear suitable protective clothing and eye/face protection.

S24/25 – Avoid contact with skin or eyes.

S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 – After contact with skin, wash immediately with plenty of soap and water.

S45 – In case of accident or if you feel unwell, seek medical attention immediately (show label where possible).

S46 – If swallowed, seek medical advice immediately and show the container or label.

SECTION 16: OTHER INFORMATION

All information, recommendations, and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity, and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, express or implied, is being made as to the effects of such use, the results obtained, or the safety and toxicity of the product nor is there any assumed liability arising out of use, by others, of the product referred to herein. The information herein is not to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.