SAFETY DATA SHEETS

This SDS packet was issued with item:

072363653

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

072343424

SURE ETCH | **MATERIAL SAFETY DATA SHEET**

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES
Boiling Point: 220C
Melting Point: ND
pH: 1-1.5
Vapor Pressure: <1
Appearance/Odor: Red, slightly viscous fluid
Specific Gravity: >1.2
Solubility in H2O: Complete

SECTION X: STABILITY AND REACTIVITY
Stability: Unstable ( ) Condition to avoid: Prolonged extreme heat.
Stable (X)
Incompatibility: (Materials to avoid) Metals, caustics, alkaline materials.
Hazardous Decomposition Products: None.
Hazardous Polymerization: May Occur ( ) Conditions to avoid: ND
Will Not Occur (X) None

SECTION XI: TOXICOLOGICAL INFORMATION
No evidence of carcinogenicity.

SECTION XII: ECOLOGICAL INFORMATION
Waste may be considered as inert material.

SECTION XIII: DISPOSAL CONSIDERATIONS
Dispose of safely in accordance with local, state, and federal regulations.

SECTION XIV: TRANSPORT INFORMATION
Stable under normal conditions of use, transportation, and storage.

SECTION XV: REGULATORY INFORMATION
510k #: K031915

SECTION XVI: OTHER INFORMATION
None

The data and information given in this msds are accurate on the date of preparation. It does not indicate any warranty or representation. We disclaim all liability relating to use of this material since this is beyond our control.

Danville

3420 FOSTORIA WAY STE. A-200
SAN RAMON, CALIFORNIA 94583 USA
PHONE 800/827-7940 FAX 925/973-0764

8901 I-00 REV E

DANVILLE | **PHOSPHORIC ETCHANT**

Sure Etch

INSTRUCTIONS

TOOTH SURFACES

Sure Etch is 37% phosphoric acid intended for preparing tooth surfaces for bonding. It is also used prior to application of silanes to dental porcelains and pressed ceramics.

ENAMEL AND DENTIN ETCHING

The appropriate etching time is determined by the manufacturer of bonding agent being used. Therefore follow manufactures instructions for etching. If etching instructions are not provided, proceed as follows.

1. Clean the tooth surface with a pumice/water slurry or with aluminum oxide delivered by an air abrasion device such as Danville's PrepStart.
2. Rinse with water and dry with clean air.
3. Apply Sure Etch to the tooth for 5-30 seconds, or as indicated by adhesive manufacturers instructions:

   a. Sure Etch Liquid is applied with a brush such as Microbrush (Centrix), a straight bristled brush, or a sponge applicator.

   b. Sure Etch Gel is applied directly out of the syringe after affixing a clean needle tip.

SURE ETCH INSTRUCTIONS

4. Rinse well with water.
5. Blow dry with oil-free air or, if appropriate for the bonding agent, blot dry or leave moist per bond manufacturer's instructions.

   Note: When dry, etched enamel should have a frosted appearance. If the frosted appearance is absent, re-etch or check for etching barriers such as residual composite and take appropriate steps to remove it. Then re-etch.
6. Proceed with the bonding agent application, per manufacturers instructions. It is important to avoid contaminating the etched tooth with saliva or other contaminants before the bonding agent is applied.
7. After use, disinfect the Sure Etch container. Of using the Gel, discard the used tip and recap the syringe to prevent dehydration. If using the Liquid, tightly recap the bottle to prevent evaporation.

89011-00 REV E

SURE ETCH MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Company:	Danville Materials 3420 Fostoria Way Ste. A-200 San Ramon, CA 94583
Phone:	(800) 827-7940
Fax:	(925) 973-0764
Prepared/Reviewed	September 27, 2011

SECTION II: HAZARD(S) IDENTIFICATION
None

SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

Components	% Range	C.A.S.	ACGIH TLV	OSHA PEL
Phosphoric Acid	34-38	7664-38-2	1mg/m3	1mg/kg
Water	54-62	7732-18-5	NA	NA
Glycerine	1-5	56-81-5	10mg/m^3	12600mg/kg

(ND = Not Determined NA = Not Applicable NL = Not Listed)

SECTION IV: EMERGENCY AND FIRST AID PROCEDURES
Skin: Wash off affected area with soap and water.
Ingestion: Drink one or two glasses of water or milk.
Eyes: Rinse immediately with plenty of water and seek medical advice.
Inhalation: Remove to fresh air.

SECTION V: FIRE-FIGHTING MEASURES
Flash Point: NA
Extinguishing Media: NA
Special Fire Fighting Procedures: NA
Flammable Limits: ND
Unusual Fire and Explosion Hazards: NA

SECTION VI: ACCIDENTAL RELEASE MEASURES
None

SECTION VII: HANDLING AND STORAGE
Spill Management: Use absorbent to collect the material. Wash contaminated surface with soap and water.

SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION
Primary Route(s) of Exposure: Skin, Ingestion, Inhalation
OSHA Permissible Exposure Limits: None
ACGIH Threshold Exposure Limit: None
Other Exposure Limit Used: None
Eye: Corrosive. May cause severe eye irritation and burns. Permanent tissue damage may occur.
Skin: Corrosive. May cause severe skin irritation.
Inhalation: Mist and vapor may cause severe respiratory system irritation.
Ingestion: Corrosive. May cause severe digestive system irritation.
Respiratory: None required Eye Protection: Safety goggles
Glove: Rubber/PVC gloves Other Clothing & Equipment: None
Ventilation: None required Hygienic Practices: Use good clinical hygiene

Sure Etch

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name: **Sure Etch**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **89011-00**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Supplier Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Emergency telephone number:

ChemTrec Inc 1-800-424-9300,703-527-3887 (CHEMTREC)

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Corrosive
Skin corrosion, category 1B
Corrosive to metals, category 1
Serious eye damage, category 1

Corrosive to Metals 1.

Skin Corrosion 1B.

Serious eye damage 1.
Signal word: Danger

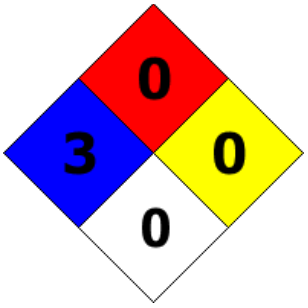
Hazard statements:
May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary statements:
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use. Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.
Wash skin thoroughly after handling. Immediately call a POISON CENTER or doctor/physician.
Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Absorb spillage to prevent material damage.
Specific treatment (see supplemental first aid instructions on this label). Store locked up.
Store in corrosive resistant stainless steel container with a resistant inner liner. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS

E 

NFPA/HMIS



NFPA SCALE (0-4)

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 7664-38-2	Phosphoric Acid	34-48 %
CAS 7732-18-5	Water	54-62 %
CAS 56-81-5	Glycerin	1-5 %
		Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Seek medical attention immediately. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position.

After skin contact: Remove contaminated clothing and wash before reuse or discard. Wash affected area with soap and water. Rinse exposed skin with water for 20 minutes. Immediately seek medical attention.

After eye contact: Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Immediately seek medical attention. Continue rinsing eyes during transport to the hospital.

After swallowing: Seek medical attention immediately. Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Spasm, inflammation and edema of the larynx. Burning sensation. Inflammation and edema of the bronchi, pneumonitis, pulmonary edema. 7664-38-2: Stomach - Irregularities - Based on Human Evidence. 7664-38-2: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Hydrogen gas is released in contact with most metals. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): None

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Soak up with inert absorbent material. Wear protective eyeware, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor.

Reference to other sections:

None

SECTION 7 : Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with skin and eyes. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection



Control Parameters:

7664-38-2, Phosphoric Acid, ACGIH TLV: 1 mg/m³ as TWA.
7664-38-2, Phosphoric Acid, ACGIH TLV 3 mg/m³ as STEL.
7664-38-2, Phosphoric Acid, OSHA PEL†: TWA 1 mg/m3 (See 29 CFR 1910.1000 Appendix G).
7664-38-2, Phosphoric Acid, NIOSH REL: TWA 1 mg/m3.
7664-38-2, Phosphoric Acid, NIOSH REL ST: 3 mg/m3.
7664-38-2, Phosphoric Acid, NIOSH IDLH: 1000 mg/m3.

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles and faceshield (8 - inch minimum) are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before rewearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Red,slightly vicousliquid	**Explosion limit lower:** **Explosion limit upper:**	Not Determined Not Determined
Odor:	None	**Vapor pressure:**	<1
Odor threshold:	Not Determined	**Vapor density:**	Not Determined
pH-value:	1 - 1.5	**Relative density:**	Not Determined
Melting/Freezing point:	Not Determined	**Solubilities:**	Soluble in water.
Boiling point/Boiling range:	220° C	**Partition coefficient (n-octanol/water):**	Not Determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature:**	Not Determined
Evaporation rate:	Not Determined	**Decomposition temperature:**	Not Determined
Flammability (solid,gaseous):	Not Determined	**Viscosity:**	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: >1.2			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.
Chemical stability: Stable under normal conditions.
Possible hazardous reactions: None under normal processing.
Conditions to avoid: Prolonged extreme heat.

Incompatible materials: Metals, strong bases, amines, alcohols, aldehydes.
Hazardous decomposition products: Oxides of phosphorus, reactions with certain metals may release explosive and flammable hydrogen gases.

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	7664-38-2	LD50 orl - rat: 1530 mg/m3
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Dermal:	7664-38-2	Skin corrosion/irritation Irritating to skin.
Ocular:	7664-38-2	Eyes - Rabbit Result : Corrosive to eyes
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity
7664-38-2: Phosphoric acid has moderate acute and chronic toxicity to aquatic life in waters of low alkalinity.

Persistence and degradability: Readily degradable in the environment.
Bioaccumulative potential: The phosphorus element is an essential nutrient for flora and fauna.
Mobility in soil: Aqueous solution has high mobility in soil.
Other adverse effects: None

SECTION 13 : Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain. Treat the solid residue as normal refuse. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage.

SECTION 14 : Transport information

UN-Number

1805

UN proper shipping name

Phosphoric Acid Solution

Transport hazard class(es)

Class:
8 Corrosive substances

Packing group: III
Environmental hazard: Not listed as a Marine Polllutant.
Transport in bulk:
Special precautions for user: None

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7664-38-2 Phosphoric acid 5000

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

7664-38-2 Phosphoric acid

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the

SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

None

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

Effective date: 06.05.2015
Last updated: 06.17.2015