Mobility in soil: No further relevant information available.
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATION

Waste treatment methods
Recommendation:
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

UN-Number	
DOT, IMDG, IATA	UN1805
UN proper shipping name	
DOT	Phosphoric acid solution mixture
IMDG, IATA	PHOSPHORIC ACID, SOLUTION mixture
Transport hazard class(es)	
DOT	
	
Class	8 Corrosive substances
Label	8
IMDG, IATA	
	
Class	8 Corrosive substances
Label	8
Packing group	
DOT, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Corrosive substances
Hazard identification number (Kemler-code):	80
EMS Number:	F-A,S-B
Segregation groups	Acids
Stowage Category	A
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5L On cargo aircraft only: 60 L
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1805 PHOSPHORIC ACID, SOLUTION MIXTURE, 8, III

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):	
None of the ingredients are listed.	
Section 313 (Specific toxic chemical listings):	
7664-38-2	Phosphoric Acid
1345-16-0	Dark Blue Pigment
TSCA (Toxic Substances Control Act):	
All components have the value ACTIVE.	
Hazardous Air Pollutants	
1345-16-0	Dark Blue Pigment

Proposition 65

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.

Carcinogenic categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements
Medical Devices, Cosmetics, and Drugs are exempt from the labeling requirements of the Globally Harmonized System (GHS).
Hazard pictograms GHS05, GHS07, GHS08
Signal word Danger
Hazard-determining components of labeling:
Phosphoric Acid
Hazard statements
Harmful if inhaled
Causes severe skin burns and eye damage.
Suspected of causing cancer.
Precautionary statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust or mists.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair):Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

Chemical safety assessment:
Device is a strong acid and is extremely toxic. It is to be used only as directed with PPE, and only by licensed dental professionals.

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SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Department issuing SDS: Environmental, Health & Safety
Contact: Customer Service
Date of preparation/last revision November 2020
Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 1: Acute toxicity – Category 1
Skin Corr.1A: Skin corrosion/irritation – Category 1A
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Carc. 2: Carcinogenicity – Category 2

Max Etch

35% Phosphoric Acid

INSTRUCTIONS FOR USE

Max Etch is a 35% phosphoric acid etchant solution with an optimum viscosity. The flowability allows precise placement, including occlusal grooves, yet is viscous enough to prevent migration. Max Etch is self-limiting in its depth of etch (average depth of 1.9µ with 15 second etch). This etchant contains no glycerin and is designed for rapid and complete removal upon rinsing.

INDICATIONS FOR USE

Used for etching enamel and dentin prior to applying bonding adhesives and placing composite restorations or dental sealants.

DIRECTIONS FOR USE

1. **FOR 5mL SYRINGE**
   a. Remove luer cap.
   b. Securely attach working tip of choice.
   c. Verify etchant flow prior to applying intraorally.
2. **FOR 30mL SYRINGE**
   a. Remove luer cap from syringe.
   b. Attach the luer-lock "coupler" to the uncapped end of the Max Etch 30mL syringe by placing the coupler on the end of the syringe and firmly rotating until fully engaged (1/2 turn).
   c. Ensure the plunger on the Max Etch 1.2mL syringe is pushed into the barrel as far as it can go. Place the uncapped end of the empty Max Etch 1.2mL syringe on the open end of the luer-lock coupler and rotate until firmly engaged (1/2 turn).
   d. Depress 30mL syringe plunger while guiding 1.2mL syringe plunger to desired fill.
   e. Separate syringes and re-cap 30mL syringe with luer cap.
   f. Securely attach working tip to 1.2mL syringe.
3. **DIRECT PLACEMENT INSTRUCTIONS**
   a. Isolate tooth (teeth).
   b. Use pumice, disk or diamond bur on uncut enamel.
   c. Rinse and dry prepared area.
   d. Verify etchant flow prior to applying intraorally.
   e. Apply etchant to enamel and dentin (15 seconds).
   f. Rinse thoroughly, dry and proceed per adhesive manufacturer's instructions.
4. **RESTORATIVE PHOSPHORIC ACID CLEANSING**
   a. Apply etch to inside of porcelain veneer or crown for 5 -10 seconds.
   b. Rinse and dry.

PRECAUTIONS AND WARNINGS

1. Carefully read and understand all instructions before using.
2. Keep out of the reach of children.
3. If product comes in contact with any soft tissue, IMMEDIATELY rinse area with copious amounts of water.
4. Near pulp exposures should be treated with a protective base prior to placing etchant.
5. Re-cap, disinfect and wipe syringe with an intermediate level disinfectant between uses. If syringe cover is used, remove tip, re-cap and discard syringe cover.
6. Dispose of tip and empty syringe properly.
7. Verify flow of all syringes prior to applying intraorally. If resistant is met, replace tip and recheck. Use only recommended tips. To avoid cross-contamination, do not re-use tips.
8. Store at room temperature.
9. Do not use after expiration date noted on the container.

Clinician's Choice®

Max Etch

35% Phosphoric Acid

1.800.265.3444
519.641.3066
www.clinicianschoice.com

Max Etch

35% Phosphoric Acid

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

1.1. Product identifier
Product name: Max Etch 35% Phosphoric Acid
Product description: Phosphoric acid dental etchant

1.2. Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Professional dental acid etching solution

1.3. Details of the supplier of the safety data sheet
Manufacturer/Distributor
Clinician's Choice Dental Products, Inc.
167 Central Avenue, London, ON, Canada, N6A 1M6
1.800.265.3444
519.641.3066
info@clinicianschoice.com

1.4. Emergency telephone number
1.800.265.3444
519.641.3066

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Label elements
GHS label elements
Medical Devices, Cosmetics, and Drugs are exempt from the labeling requirements of the Globally Harmonized System (GHS).
Hazard pictograms GHS05, GHS07, GHS08
Signal word Danger
Hazard-determining components of labeling:
Phosphoric Acid
Hazard statements
Harmful if inhaled.
Causes severe skin burns and eye damage.
Suspected of causing cancer.
Precautionary statements
P201 Obtain special instructions before use.
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P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair):Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

Classification system:
NFPA ratings (scale 0–4)
Health = 3
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0–4)

HEALTH 3	Health = *3
FIRE 0	Fire = 0
REACTIVITY 0	Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

7664-38-2	Phosphoric Acid	<40%
	Acute Tox., 1, H330; Met. Corr., 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox., 4, H302	
1345-16-0	Dark Blue Pigment	<1%
	Carc. 2, H351	

SECTION 4: FIRST-AID MEASURES

Description of first aid measures
General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
After skin contact:
Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: Do NOT induce vomiting. Drink copious amounts of water and provide fresh air. Immediately call a doctor.
Information for doctor:
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents:
Water spray
Alcohol resistant foam
Dry Chemical
Carbon dioxide
Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture
Phosphine, oxides of phosphorous, hydrogen gas
During heating or in case of fire poisonous gases are produced.
Advice for fire fighters
General: Evacuate all personnel.
Use fire extinguishing methods suitable to surrounding conditions.
Protective equipment:
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Mouth respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Environmental precautions: Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
Protective Action Criteria for Chemicals

PAC-1:		
7664-38-2	Phosphoric Acid	3mg/m³
PAC-2:		
7664-38-2	Phosphoric Acid	30mg/m³
PAC-3:		
7664-38-2	Phosphoric Acid	150mg/m³

SECTION 7: HANDLING AND STORAGE

Handling:
Precautions for safe handling
Safety glasses should be used by the patient and doctor. Use equipment for eye protection tested and approved under appropriate standards such as ANSI Z87.1
Avoid contact with eyes, skin, and clothing.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Store only in the original receptacle.
Provide ventilation for receptacles.

Information about storage in one common storage facility:
Store away from water.
Store away from metals.
Further information about storage conditions:
Protect from heat and direct sunlight. Store in a cool place.
See product labeling.
Keep receptacle tightly sealed.
Specific end use(s): Professional Dental Acid Etching Solution

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.
Control parameters
Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit:
At this time, the remaining constituent has no known exposure limits.

7664-38-2	Phosphoric Acid	
PEL	Long-term value: 1mg/m³	
REL	Short-term value: 3mg/m³	Long-term value: 1mg/m³
TLV	Short-term value: 3mg/m³	Long-term value: 1mg/m³

Additional information: The lists that were valid during the creation were used as basis.

Exposure Controls
Personal protective equipment:
General protective and hygienic measures:
Do not inhale gases/fumes/aerosols.
Do not eat or drink while working.
When using do not smoke.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:
Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves
The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:
Safety glasses should be used and by the patient and doctor. Use equipment for eye protection tested and approved under appropriate standards such as ANSI Z87.1

Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Gel
Color:	Blue
Odor:	Odorless
Odor threshold:	Not determined.
pH-value at 20°C:	<1

Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20°C:	1.03-1.23g/cm³
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in/Miscibility with	
Water:	Partially soluble
Partition coefficient (n-octanol/water): Not determined.	
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Water:	<80%
VOC content:	0.00% 0.0g/l/0.00lb/gal
VOC(EC)	0.00%
Other information	Refractive Index: Brix 25-28

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Stable
Chemical stability
Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid
Water, Moist Air
Excess heat
Incompatible materials:
Strong Alkalis
Metals
Hazardous decomposition products: Phosphine, oxides of phosphorous, hydrogen gas
Additional information:
Reacts with bases to form phosphate salts and is corrosive (especially when hot) to many metals and alloys. Liberates explosive hydrogen gas when reacting with chlorides and stainless steel, and reacts violently with sodium tetrahydroborate. Forms flammable gases with sulfides, mercaptans, cyanides and aldehydes. Also forms toxic fumes with cyanides, sulfides, fluorides, organic peroxides and halogenated organics.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification:
ATE (Acute Toxicity Estimate)

Oral	LD50	4,135mg/kg (rat)
Dermal	LD50	7,405mg/kg (rabbit)
Inhalative	LC50/4 h	1.14mg/l (rabbit)

7664-38-2 Phosphoric Acid		
Oral	LD50	1,530mg/kg (rat)
Dermal	LD50	2,740mg/kg (rabbit)
Inhalative	LC50/4 h	0.42225mg/l (rabbit)

Primary irritant effect:
On the skin: Strong caustic effect on skin and mucous membranes.
On the eye: Strong caustic effect.
Strong irritant with the danger of severe eye injury.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
1345-16-0	Dark Blue Pigment	2B

NTP (National Toxicology Program)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

Carcinogenicity: Dark Blue Pigment is listed as an IARC Group 2B carcinogen.
Reproductive toxicity: Does not meet the classification criteria for this hazard class.
Specific target organ toxicity - single exposure: Does not meet the classification criteria for this hazard class.
Specific target organ toxicity - repeated exposure: Does not meet the classification criteria for this hazard class.
Aspiration hazard: Does not meet the classification criteria for this hazard class.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential No further relevant information available.