

# Porcelain etch (4%)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 2/19/2015

Version: 8

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Porcelain etch (4%)

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Porcelain Etchant  
For professional use only.

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer:

Reliance Orthodontic Products Inc. 1540 West Thorndale Ave. Itasca, IL 60143 USA

800-323-4348 / 630-773-4009

630-773-4009, during normal business hours

#### 1.4. Emergency telephone number

Emergency number : 1-703-527-3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Acute Tox. 2 (Oral)	H300
Acute Tox. 1 (Dermal)	H310
Acute Tox. 2 (Inhalation:dust,mist)	H330
Skin Corr. 1A	H314
Eye Irrit. 2A	H319
Resp. Sens. 1	H334

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05



GHS06



GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H300+H310+H330 - Fatal if swallowed, in contact with skin or if inhaled  
H314 - Causes severe skin burns and eye damage  
H319 - Causes serious eye irritation  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (GHS-US) :

P262 - Do not get in eyes, on skin, or on clothing  
P264 - Wash hands thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear protective gloves, eye protection  
P301+P310 - If swallowed: Immediately call a poison center/doctor  
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  
P330 - Rinse mouth  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P361 - Take off immediately all contaminated clothing  
P363 - Wash contaminated clothing before reuse  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P501 - Dispose in a safe manner in accordance with local/national regulations.

#### 2.3. Other hazards

No additional information available

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### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Polyacrylamidomethylpropane sulfonic acid	(CAS No) 27119-07-9	50 - 75	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment is urgent (see ... on this label). If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Immediately call a POISON CENTER or doctor/physician. Specific measures (see ... on this label). Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Fatal if swallowed. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see First aid measures on this label).

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after inhalation	: Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Fatal in contact with skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Fatal if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Reactivity	: Thermal decomposition generates : Corrosive vapors.
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### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

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### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing. Avoid breathing mist, vapors.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

Incompatible products : Strong bases. strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or face shield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear respiratory protection. In case of inadequate ventilation wear respiratory protection.

Other information : When using, do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Colorless.

Odor : characteristic

Odor threshold : No data available

pH : <= 0

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

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Solubility	: Water: Solubility in water of component(s) of the mixture : • :
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled.

Porcelain etch (4%)	
ATE US (oral)	5.00000000 mg/kg body weight
ATE US (dermal)	5.00000000 mg/kg body weight
ATE US (dust, mist)	0.05000000 mg/l/4h

Polyacrylamidomethylpropane sulfonic acid (27119-07-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: <= 0
Serious eye damage/irritation	: Causes serious eye irritation. pH: <= 0
Respiratory or skin sensitization	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Polyacrylamidomethylpropane sulfonic acid (27119-07-9)	
IARC group	4 - Probably Not Carcinogenic

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

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<b>Polyacrylamidomethylpropane sulfonic acid (27119-07-9)</b>	
LOAEL (oral, rat)	N/A mg/kg body weight
LOAEL (dermal, rat/rabbit)	N/A mg/kg body weight
LOAEL (inhalation, rat, gas)	N/A ppmV/4h
LOAEL (inhalation, rat, vapour)	N/A mg/l/4h
LOAEL (inhalation, rat, dust/mist/fume)	N/A mg/l/4h

Specific target organ toxicity (repeated exposure) : Not classified

<b>Polyacrylamidomethylpropane sulfonic acid (27119-07-9)</b>	
LOAEL (oral, rat, 90 days)	N/A mg/kg bodyweight/day
LOAEL (dermal, rat/rabbit, 90 days)	N/A mg/kg bodyweight/day
LOAEL (inhalation, rat, gas, 90 days)	N/A ppmV/6h/day
LOAEL (inhalation, rat, vapour, 90 days)	N/A mg/l/6h/day
LOAEL (inhalation, rat, dust/mist/fume, 90 days)	N/A mg/l/6h/day

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Fatal if swallowed. Fatal if inhaled. Fatal in contact with skin.

Symptoms/injuries after inhalation : Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/injuries after skin contact : Fatal in contact with skin.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Fatal if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

<b>Porcelain etch (4%)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Porcelain etch (4%)</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

## SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1790 Hydrofluoric acid with not more than 60 percent strength, 8, II

UN-No. (DOT) : 1790

DOT NA no. : UN1790

Proper Shipping Name (DOT) : Hydrofluoric acid  
with not more than 60 percent strength

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Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive  
6.1 - Poison inhalation hazard



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : A6 - For combination packaging, if plastic inner packaging are used, they must be packed in tightly closed metal receptacles before packing in outer packaging.  
A7 - Steel packaging must be corrosion-resistant or have protection against corrosion.  
B15 - Packaging must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.  
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
N5 - Glass materials of construction are not authorized for any part of a packaging which is normally in contact with the hazardous material.  
N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.  
T8 - 4 178.274(d)(2) Normal..... Prohibited  
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.  
TP12 - This material is considered highly corrosive to steel.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 243

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L

DOT Vessel Stowage Location : D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other : 12 - Keep as cool as reasonably practicable, 40 - Stow "clear of living quarters"

### Additional information

Other information : No supplementary information available.

### ADR

Transport document description : UN 1790, 8 (6.1), II, (E)

Packing group (ADR) : II

Class (ADR) : 8 - Corrosive substances

Hazard identification number (Kemler No.) : 86

Classification code (ADR) : CT1

Hazard labels (ADR) : 8 - Corrosive substances  
6.1 - Toxic substances



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Orange plates

:



Tunnel restriction code (ADR)

: E

LQ

: 1L

Excepted quantities (ADR)

: E2

### Transport by sea

UN-No. (IMDG)

: 1790

Class (IMDG)

: 8 - Corrosive substances

### Air transport

UN-No.(IATA)

: 1790

Class (IATA)

: 8 - Corrosives

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 2 (Oral) H300

Acute Tox. 1 (Dermal) H310

Acute Tox. 2 (Inhalation:dust,mist) H330

Skin Corr. 1A H314

Full text of H-phrases: see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

## SECTION 16: Other information

Other information

: None.

Full text of H-phrases: see section 16:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H300	Fatal if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled

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H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
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SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*