

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

1 Identification

- **Product identifier**
- **Trade name:** VITA CERAMICS ETCH
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available
- **Application of the substance / the mixture** Auxiliary for manufacture of dental prothesis
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
VITA Zahnfabrik
H. Rauter GmbH & Co. KG
- Postfach 1338
D 79704 Bad Säckingen
e-mail: info@vita-zahnfabrik.com
- **Emergency telephone number:** Tel.: ++49-(0)761-19240

Tel.: 07761/562-0
Fax: 07761/562299

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 2 H310 Fatal in contact with skin.



GHS05 Corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Toxic

Toxic by inhalation, in contact with skin and if swallowed.



Corrosive

Causes severe burns.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 1)

· Hazard pictograms



GHS05 GHS06

· Signal word Danger

· Hazard-determining components of labeling:

hydrogen fluoride

· Hazard statements

H290 May be corrosive to metals.

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 or doctor/physician.

P361 Remove/Take off immediately all contaminated clothing.

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 = 4

Fire = 0

Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

7664-93-9	sulphuric acid C R35 Skin Corr. 1A, H314	2.5-10%
7664-39-3	hydrogen fluoride T+ R26/27/28; C R35 Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Skin Corr. 1A, H314	2.5-10%
64-17-5	ethanol F R11 Flam. Liq. 2, H225	2.5-10%

(Contd. on page 3)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 2)

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation**
Seek medical treatment.
Supply fresh air or oxygen; call for doctor.
- **After skin contact**
Rub in Ca-gluconate solution or Ca-gluconate gel immediately.
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
Call a doctor immediately.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Seek immediate medical advice.
Rinse out mouth and then drink plenty of water.
- **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.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.
- **Additional information** None

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Extractor required on object.
Open and handle receptacle with care.
Prevent formation of aerosols.

(Contd. on page 4)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 3)

- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from flammable substances.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class** 6.1 A
- **Specific end use(s)** No further relevant information available.

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:**

7664-39-3 hydrogen fluoride

PEL 3 ppm

REL Short-term value: C 5* mg/m³, C 6* ppm
Long-term value: 2.5 mg/m³, 3 ppm
*15-min

TLV Short-term value: C 1.64 mg/m³, C 2* ppm
Long-term value: 0.41 mg/m³, 0.5* ppm
*as F; Skin

64-17-5 ethanol

PEL 1900 mg/m³, 1000 ppm

REL 1900 mg/m³, 1000 ppm

TLV 1880 mg/m³, 1000 ppm

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

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
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 and skin.

- **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.
Use ventilation hood

- **Protection of hands:**



Protective gloves.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

e.g. Dermatril P, KCL Nr. 743

Nitrile rubber, NBR

The selection of the 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** e.g. KCL Dermatril P 480 min

(Contd. on page 5)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 4)

· Eye protection:



Tightly sealed goggles.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Light red
Odor:	Characteristic

· pH-value at 20 °C (68 °F): 2

· Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	100 °C (212 °F)

· Flash point: Not applicable

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Oxidizing properties Not determined

· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

· Density at 20 °C (68 °F): 1.06 g/cm³ (8.846 lbs/gal)

· Solubility in / Miscibility with

Water: Fully miscible

· Solvent content:

Organic solvents:	3.2 %
Water:	82.6 %

· Other information No further relevant information available.

10 Stability and reactivity

- **Reactivity** No decomposition if used and stored according to specifications.
- **Chemical stability** No decomposition if used and stored according to specifications.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.

(Contd. on page 6)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 5)

- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Corrosive
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)**

7664-93-9	sulphuric acid	I
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- **NTP (National Toxicology Program)**

7664-93-9	sulphuric acid	K
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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.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|----------------------------------|--|
| · UN-Number | |
| · DOT | UN2922 |
| · ADR, IMDG, IATA | 2922 |
| · UN proper shipping name | |
| · ADR | 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, SULPHURIC ACID) |
| · IMDG, IATA | CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, SULPHURIC ACID) |

(Contd. on page 7)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 6)

· **Transport hazard class(es)**· **DOT**· **Class**

8 Corrosive substances.

· **Label**

8+6.1

· **ADR, IMDG, IATA**· **Class**

8 Corrosive substances

· **Label**

8+6.1

· **Packing group**· **DOT, ADR, IMDG, IATA**

II

· **Environmental hazards:**· **Marine pollutant:**

No

· **Special precautions for user**

Warning: Corrosive substances

· **Danger code (Kemler):**

86

· **EMS Number:**

F-A,S-B

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **UN "Model Regulation":**

UN2922, CORROSIVE LIQUID, TOXIC, N.O.S., 8 (6.1), II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **SARA Section 355 (extremely hazardous substances)**

7664-93-9 sulphuric acid

7664-39-3 hydrogen fluoride

· **SARA Section 313 (specific toxic chemical listings)**

7664-93-9 sulphuric acid

7664-39-3 hydrogen fluoride

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **Cancerogenity categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

7664-93-9 sulphuric acid

A2

64-17-5 ethanol

A3

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/09/2014

Reviewed on 01/09/2014

Trade name: VITA CERAMICS ETCH

(Contd. of page 7)

· **MAK (German Maximum Workplace Concentration)**

7664-93-9	sulphuric acid	4
64-17-5	ethanol	5

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
NK	2,5-10

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

· *** Data compared to the previous version altered.**

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