

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### VITA CERAMICS ETCH

Revision date: 18.11.2022

Product code: 019

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

##### 1.1. Product identifier

VITA CERAMICS ETCH

UFI: J600-604V-K007-5NU5

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

###### Use of the substance/mixture

Use as laboratory reagent

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

Company name: VITA Zahnfabrik H.Rauter GmbH &amp; Co.KG

Street: Spitalgasse 3

Place: D-79713 Bad Säckingen

Post-office box: 1338

D-79704 Bad Säckingen

Telephone: +49(0)7761-562-0

Telefax: +49(0)7761-562-299

e-mail: info@vita-zahnfabrik.com

Contact person: regulatory affairs

e-mail: info@vita-zahnfabrik.com

Internet: www.vita-zahnfabrik.com

Responsible Department: Regulatory Affairs

##### 1.4. Emergency telephone number:

+49-(0)761-19240

#### SECTION 2: Hazards identification

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

###### Regulation (EC) No 1272/2008

Met. Corr. 1; H290

Acute Tox. 2; H310

Acute Tox. 3; H301

Acute Tox. 4; H332

Skin Corr. 1A; H314

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### Regulation (EC) No 1272/2008

###### Hazard components for labelling

Sulphuric acid ... %

hydrofluorid acid

Signal word:

Danger

Pictograms:



###### Hazard statements

H301

Toxic if swallowed.

H310

Fatal in contact with skin.

H314

Causes severe skin burns and eye damage.

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H332 Harmful if inhaled.

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P405 Store locked up.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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/doctor.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7664-93-9	Sulphuric acid ... %			5 - < 10 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			
7664-39-3	hydrogen fluoride			1 - < 5 %
	231-634-8	009-002-00-6	01-2119458860-33	
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1A; H310 H330 H300 H314			
64-17-5	ethyl alcohol			1 - < 5 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7664-93-9	231-639-5	Sulphuric acid ... %	5 - < 10 %
		Skin Corr. 1A; H314: $\geq 15 - 100$ Skin Irrit. 2; H315: $\geq 5 - < 15$ Eye Irrit. 2; H319: $\geq 5 - < 15$	
7664-39-3	231-634-8	hydrogen fluoride	1 - < 5 %
		inhalation: ATE = 0.5 mg/l (vapours); inhalation: ATE = 0.05 mg/l (dusts or mists); dermal: ATE = 5 mg/kg; oral: ATE = 5 mg/kg	
64-17-5	200-578-6	ethyl alcohol	1 - < 5 %
		dermal: LD50 = 7060 mg/kg	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

##### After inhalation

Provide fresh air. Medical treatment necessary. IF INHALED: Call a POISON CENTER/doctor// if you feel unwell.

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#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Call a physician immediately. After contact with skin, wash immediately with plenty of water and soap. IF ON SKIN (or hair): Ca-Gluconate solution Immediately call a POISON CENTER/doctor/.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Immediately call a POISON CENTER/doctor/. Ca-Gluconate solution

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately.

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

No information available.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

##### General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

##### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

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#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

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

##### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

##### Hints on joint storage

No special measures are necessary.

#### 7.3. Specific end use(s)

Use as laboratory reagent

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
64-17-5	Ethyl alcohol	1000	-		STEL (15 min)	
7664-39-3	Hydrogen fluoride (as F)	1.8	1.5		TWA (8 h)	
		3	2.5		STEL (15 min)	
7664-93-9	Sulphuric acid	-	0.05		TWA (8 h)	

##### Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
7664-39-3	Hydrogen fluoride	Fluoride	2 mg/L	Urine	Prior to shift

#### 8.2. Exposure controls



##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection: goggles. Wear eye/face protection.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is

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recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommended glove articles KCL Dermatril P Wearing time with occasional contact (splashes): 480 min

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

If handled uncovered, arrangements with local exhaust ventilation have to be used.

## SECTION 9: Physical and chemical properties

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

Physical state:

Colour: light red

Odour: characteristic

#### Changes in the physical state

Melting point/freezing point: not determined

Boiling point or initial boiling point and boiling range: 100 °C

#### Flammability

Solid/liquid: not applicable

Gas: not applicable

#### Explosive properties

The product is not: Explosive.

#### Self-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

pH-Value: 2,0

#### Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Vapour pressure: <=1100 hPa  
(at 50 °C)

Density: 1,06000 g/cm<sup>3</sup>

Relative vapour density: not determined

### 9.2. Other information

#### Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

#### Other safety characteristics

Solid content: 1,5 %

Evaporation rate: not determined

#### Further Information

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

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#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

none

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Acute toxicity

Fatal in contact with skin.

Toxic if swallowed.

Harmful if inhaled.

##### ATEmix calculated

ATE (oral) 104,2 mg/kg; ATE (dermal) 104,2 mg/kg; ATE (inhalation vapour) 10,42 mg/l; ATE (inhalation dust/mist) 1,042 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-39-3	hydrogen fluoride				
	oral	ATE 5 mg/kg			
	dermal	ATE 5 mg/kg			
	inhalation vapour	ATE 0.5 mg/l			
	inhalation dust/mist	ATE 0.05 mg/l			
64-17-5	ethyl alcohol				
	dermal	LD50 7060 mg/kg			

##### Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

##### Sensitising effects

Based on available data, the classification criteria are not met.

##### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

##### STOT-single exposure

Based on available data, the classification criteria are not met.

##### STOT-repeated exposure

Based on available data, the classification criteria are not met.

##### Aspiration hazard

Based on available data, the classification criteria are not met.

##### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising

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from the substance or mixture!

#### SECTION 12: Ecological information

##### 12.1. Toxicity

The product is not: Ecotoxic.

##### 12.2. Persistence and degradability

The product has not been tested.

##### 12.3. Bioaccumulative potential

The product has not been tested.

##### 12.4. Mobility in soil

The product has not been tested.

##### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

##### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

##### 12.7. Other adverse effects

No information available.

##### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

###### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

###### **Contaminated packaging**

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

#### SECTION 14: Transport information

##### **Land transport (ADR/RID)**

###### 14.1. UN number or ID number:

UN 2922

###### 14.2. UN proper shipping name:

CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrogen fluoride)

###### 14.3. Transport hazard class(es):

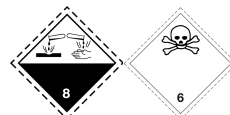
8

###### 14.4. Packing group:

II

Hazard label:

8+6.1



Classification code:

CT1

Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

Transport category:

2

Hazard No:

86

Tunnel restriction code:

E

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#### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 2922  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrogen fluoride)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
 Hazard label: 8+6.1



Classification code: CT1  
 Special Provisions: 274 802  
 Limited quantity: 1 L  
 Excepted quantity: E2

#### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 2922  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrogen fluoride)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
 Hazard label: 8+6.1



Special Provisions: 274  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-A, S-B

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** UN 2922  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrogen fluoride)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
 Hazard label: 8+6.1



Special Provisions: A3 A803  
 Limited quantity Passenger: 0.5 L  
 Passenger LQ: Y840  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 851  
 IATA-max. quantity - Passenger: 1 L  
 IATA-packing instructions - Cargo: 855  
 IATA-max. quantity - Cargo: 30 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

Warning: Acute Toxicity. strongly corrosive.

#### 14.7. Maritime transport in bulk according to IMO instruments

not applicable



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#### SECTION 15: Regulatory information

##### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

###### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to 2012/18/EU

H2 ACUTE TOXIC

(SEVESO III):

###### National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

2 - obviously hazardous to water

Skin resorption/Sensitization:

Permeates easily through outer skin and causes poisoning.

##### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s): 14.

##### 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

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

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ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

#### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	
Acute Tox. 2; H310	Calculation method
Acute Tox. 3; H301	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.

#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*