

Safety Data Sheet

according to the Preparation of Safety data Sheets for
Hazardous Chemicals Code of Practice

Revision date: 21.01.2020

VITA CERAMICS ETCH 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

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

Manufacturer

Company name:	VITA Zahnfabrik H.Rauter GmbH & Co.KG	
Post-office box:	1338	
	79704 Bad Säckingen	
Telephone:	+49(0)7761-562-0	Telefax: +49(0)7761-562-299
e-mail:	info@vita-zahnfabrik.com	
Internet:	www.vita-zahnfabrik.com	

Supplier

Company name:	Company Name	
Street:	Street	
Place:	79704 Town	
Telephone:	Phone	Telefax: Telefax
e-mail:	email	
Contact person:	Contact person	
Internet:	url	

1.4. Emergency telephone number:

+49-(0)761-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

UN-GHS (Rev.3)

Hazard categories:

Acute toxicity: Acute Tox. 2

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Fatal in contact with skin.

Toxic if swallowed.

Harmful if inhaled.

Causes severe skin burns and eye damage.

Causes serious eye damage.

2.2. Label elements

UN-GHS (Rev.3)

Hazard components for labelling

Sulphuric acid

hydrofluorid acid

Signal word: Danger

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Pictograms:



Hazard statements

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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.
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 or shower.
P362+P364	Take off contaminated clothing and wash it before reuse.
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.
P405	Store locked up.
P501	Dispose of waste according to applicable legislation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
7664-93-9	Sulphuric acid	5 - < 10 %
7664-39-3	hydrofluorid acid	1 - < 5 %
64-17-5	Ethanol	1 - < 5 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. Immediately call a doctor.

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.

IF ON SKIN (or hair): Ca-Gluconate solution. Immediately call a doctor.

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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. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor. Ca-Gluconate solution

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps. 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. In case of fire may be liberated: Gases/vapours, toxic.

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

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. 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

Advice on safe handling

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

Advice on protection against fire and explosion

Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

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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.

Hints on joint storage

No information available.

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Value:

Sulphuric acid:

1 mg/m³ TWA

3 mg/m³ STEL

hydrofluorid acid:

3 ppm (2,6 mg/m³) Peak limitation TWA

Ethanol:

1000 ppm (1880 mg/m³) TWA

Source: Workplace exposure standards for airborne contaminants, Publication date: 16 December 2019

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

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. Do not breathe gas/fumes/vapour/spray.

Eye/face protection

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

Hand protection

Wear suitable gloves.

Suitable material: NBR (Nitrile rubber)

Breakthrough time (maximum wearing time): 480 min

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 recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommended glove articles

Skin protection

Wear suitable protective clothing.

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Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	light red
Odour:	characteristic
pH-Value:	2,0

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	100 °C
Flash point:	not determined

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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Oxidizing properties

Not oxidising.

Vapour pressure: (at 50 °C)	<= 1100 hPa
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Density:	1,06000 g/cm ³
Water solubility:	easily soluble

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	1,5 %
Odour threshold:	not determined

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SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

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

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-39-3	hydrofluorid acid				
	oral	ATE 5 mg/kg			
	dermal	ATE 5 mg/kg			
	inhalation vapour	ATE 0,5 mg/l			
	inhalation aerosol	ATE 0,05 mg/l			

Irritation and corrosivity

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

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.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

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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. 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

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADG)

14.1. UN number:	UN 2922
14.2. UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrofluorid acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

Other applicable information (land transport)

HAZCHEM: 2X

Marine transport (IMDG)

14.1. UN number:	UN 2922
14.2. UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrofluorid acid)
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:	UN 2922
14.2. UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sulphuric acid, hydrofluorid acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II

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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: Toxic. strongly corrosive.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

National regulatory information

Additional information

AISC:

Sulphuric acid: Yes.

hydrofluorid acid: Yes.

Ethanol: Yes.

SUSMP:

Sulphuric acid: Yes.

hydrofluorid acid: Yes.

Ethanol: No

SECTION 16: Other information

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

ADG: Australian Dangerous Goods

AICS: Australian Inventory of Chemical Substances

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service

STEL: Short-term exposure limit

TWA: time-weighted average

TI: Technical Instructions

DGR: Dangerous Goods Regulations

UN: United Nations

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

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LD50: Lethal dose, 50%
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
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons

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.)