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

1.1. Product identifier

VITA ADIVA CERA ETCH

Product code:
6NH1-20UD-X00W-YF2U

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
Fax: +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
Fax: Telefax
E-mail: email
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
- Hydrofluoric acid
- Sulphuric 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.
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.
P361+P364 Take off immediately all 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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7664-93-9</td>
<td>Sulphuric acid</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>7664-39-3</td>
<td>Hydrofluorid acid</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethanol</td>
<td>1 - &lt; 5 %</td>
</tr>
</tbody>
</table>

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. If experiencing respiratory symptoms: 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. Call a physician immediately. IF ON SKIN (or hair): Ca-Gluconate solution.

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.

**After ingestion**
Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. If swallowed, immediately drink: Ca-Gluconate solution

**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.

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**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. Use water spray jet to protect personnel and to cool endangered containers.

---

**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

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**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**

**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 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:
Ethanol
1000 ppm (1880 mg/m³) TWA

Sulphuric acid
1 mg/m³ TWA
3 mg/m³ STEL

Hydrofluorid acid
3 ppm (2.6 mg/m³) Peak limitation 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 exhaustion 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 or smoke. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

Eye/face protection
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.

Skin protection
Wear suitable protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Provide adequate ventilation as well as local
exhaustion at critical locations.

Environmental exposure controls
Do not allow to enter into surface water or drains.
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

No information available.

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

Oxidizing properties

Not oxidising.

Vapour pressure: <= 1100 hPa
(at 50 °C)
Density: 1,06000 g/cm³
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

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
- Fatal in contact with skin.
- Toxic if swallowed.
- Harmful if inhaled.

ATEmix calculated
- ATE (oral) 100,4 mg/kg; ATE (dermal) 100,4 mg/kg; ATE (inhalation vapour) 10,04 mg/l; ATE (inhalation aerosol) 1,004 mg/l

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
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<tr>
<td>7664-39-3</td>
<td>hydrofluorid acid</td>
<td>oral</td>
<td>ATE</td>
<td>5 mg/kg</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>ATE</td>
<td>5 mg/kg</td>
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<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>0,5 mg/l</td>
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<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE</td>
<td>0,05 mg/l</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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
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
This material and its container must be disposed of as hazardous waste. 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. (hydrofluorid acid, Sulphuric 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. (hydrofluorid acid, Sulphuric 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. (hydrofluorid acid, Sulphuric acid)
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: 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
AICS
hydrofluoric acid: Yes.
Sulphuric acid: Yes.
Ethanol: Yes.

SUSPM
hydrofluoric acid: Yes.
Sulphuric acid: Yes.
Ethanol: Yes.

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%
LD50: Lethal dose, 50%
Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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