1. Identification

Product identifier

VITA CERAMICS ETCH

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Use as laboratory reagent

Details of the supplier of the safety data sheet

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

Emergency telephone number:
+49-(0)761-19240

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015

Acute toxicity: Acute Tox. 2 (dermal)
Acute toxicity: Acute Tox. 3 (oral)
Acute toxicity: Acute Tox. 4 (inhalation)
Skin corrosion/irritation: Skin Corr. 1A
Serious eye damage/eye irritation: Eye Dam. 1

Label elements

WHMIS 2015

Signal word:
Danger

Pictograms:

Hazard statements

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

Precautionary statements

Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Immediately call a POISON CENTER/doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Store locked up.

Other hazards

No information available.

3. Composition/information on ingredients

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>ethyl alcohol</td>
<td>1 - &lt; 5% (*)</td>
</tr>
</tbody>
</table>

(*) The actual concentration is withheld as a trade secret.

4. First-aid measures

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.

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.

Most important symptoms and effects, whether acute or delayed
No information available.

Indication of immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the hazardous product
Non-flammable.

Special protective equipment and precautions for fire-fighters
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.

6. Accidental release measures

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

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.

Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

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

Advice on safe handling
No special fire protection measures are necessary.

Advice on protection against fire and explosion
No special fire protection measures are necessary.

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.

8. Exposure controls/Personal protection

Control parameters
Exposure controls

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

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.

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 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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:
- 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

Flammability
- Solid: not applicable
- Gas: not applicable

Explosive properties
- The product is not: Explosive.

Lower explosive limits:
Upper explosive limits:

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

Solubility in other solvents
not determined

Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

Other information

Solid content: 1,5 %

10. Stability and reactivity

Reactivity
- No hazardous reaction when handled and stored according to provisions.

Chemical stability
- The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions
- No known hazardous reactions.

Conditions to avoid
- none
Incompatible materials
No information available.

Hazardous decomposition products
No known hazardous decomposition products.

11. Toxicological information

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 Route of exposure 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

64-17-5 ethyl alcohol dermal LD50 7060 mg/kg

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

Sensitizing 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 from the substance or mixture!

12. Ecological information

Ecotoxicity
The product is not: Ecotoxic.

Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.
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.

13. Disposal considerations

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.

14. Transport information

Marine transport (IMDG)

UN number: UN 2922
United Nations proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Wasser)
Transport hazard class(es): 8
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)

UN number: UN 2922
United Nations proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Wasser)
Transport hazard class(es): 8
Packing group: II
Hazard label: 8+6.1

Special Provisions: A3 A803
Limited quantity Passenger: 0.5 L
Passenger LOQ: 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

Environmental hazards
15. Regulatory information

Canadian regulations

16. Other information

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
- 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

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.)