

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**S-ACT**

Revision date: 25.01.2017

Product code: 00310-0001

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

S-ACT

**Art.-No.**

910.00.028

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Liquid for treating false teeth

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

Company name: Gramm Technik GmbH  
Geschäftsbereich Dental / Dental Division  
Street: Einsteinstraße 4  
Place: D-71254 Ditzingen-Heimerdingen  
Telephone: +49 (0) 7152 / 5009-60      Telefax: +49 (0) 7152/5009-80  
e-mail: gramm.dental@t-online.de  
Responsible Department: Technische Dokumentation  
Responsible for the safety data sheet: sds@gbk-ingelheim.de

**1.4. Emergency telephone number:** INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)  
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24  
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**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1A

Hazard Statements:

May be corrosive to metals.

Harmful if inhaled.

Causes severe skin burns and eye damage.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Sulphuric acid

Hydrofluoric acid

**Signal word:**

Danger

**Pictograms:****Hazard statements**

H290

May be corrosive to metals.

H302+H312+H332

Harmful if swallowed, in contact with skin or if inhaled.

H314

Causes severe skin burns and eye damage.

**Precautionary statements**

P280

Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.

### 2.3. Other hazards

Not known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Aqueous solution of acids

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7664-93-9	Sulphuric acid			< 15 %
	231-639-5	016-020-00-8	01-2119458838-20	
	Skin Corr. 1A; H314			
7664-39-3	Hydrofluoric acid			< 0,5 %
	231-634-8	009-003-00-1	01-2119458860-33	
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1A; H310 H300 H330 H314			

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately.

Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.

#### After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

Seek medical treatment immediately.

#### After contact with skin

Wash off immediately with soap and plenty of water.

Seek medical treatment immediately.

#### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical treatment by eye specialist.

#### After ingestion

Immediately give plenty of water (if possible charcoal slurry).

If possible drink milk afterwards.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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

Harmful if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

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

Treat symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Product does not burn, fire-extinguishing activities according to surrounding.

**Unsuitable extinguishing media**

Full water jet.

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

Fire may produce:

sulfur oxides

Hydrogen fluoride (HF)

Hydrogen, by reaction with metals.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit.

**Additional information**

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

In case of vapour formation use respirator.

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

Use personal protective clothing.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.

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

Shovel into suitable container for disposal.

Soak up with inert absorbent material (e.g. acid binder, universal binder).

Do not use metal containers.

**6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with skin, eyes and clothing.

Care for suitable extraction / ventilation at processing machines.

**Advice on protection against fire and explosion**

No special protective measures against fire required.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Acid resisting floor.

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Keep container tightly closed in a dry, cool and well-ventilated place.

### Advice on storage compatibility

Incompatible with:  
Acids and bases.  
With most metals.

### Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

### 7.3. Specific end use(s)

Liquid for treating false teeth

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7664-39-3	Hydrogen fluoride (as F)	1.8	1.5		TWA (8 h)	WEL
		3	2.5		STEL (15 min)	WEL
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

### 8.2. Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

#### Protective and hygiene measures

Do not inhale vapours.  
Wash hands before breaks and at the end of workday.  
When using do not eat, drink or smoke.  
Take off immediately all contaminated clothing.

#### Eye/face protection

Tightly fitting goggles (EN 166).  
Eye wash bottle with pure water (EN 15154).

#### Hand protection

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance approx. 480 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.  
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.  
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

#### Skin protection

Acid-resistant protective clothing, rubber boots.

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type E) (EN 14387).

## SECTION 9: Physical and chemical properties

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

Physical state: Liquid  
Colour: Colourless  
Odour: Odourless

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**Test method**

pH-Value: 0,95

**Changes in the physical state**

Flash point: n. a.

Lower explosion limits: n. a.

Upper explosion limits: n. a.

Ignition temperature: n. a.

Vapour pressure: approx. 23 hPa  
(at 20 °C)Density (at 20 °C): approx. 1,12 g/cm<sup>3</sup>Water solubility: Completely miscible  
(at 20 °C)

Solvent content: 0 %

**9.2. Other information**

No data available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Reactions with strong acids and alkalies.

**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

**10.5. Incompatible materials**

Strong acids and strong bases

Metals

**10.6. Hazardous decomposition products**Sulphurous oxides (SO<sub>x</sub>)

Hydrogen fluoride.

Hydrogen, by reaction with metals.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Harmful if swallowed, in contact with skin or if inhaled.

No toxicological data available.

**Irritation and corrosivity**

Causes severe skin burns and 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.

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**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**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

**Practical experience****Other observations**

Ingestion of aqueous solution causes gastrointestinal burns.

The product causes bad healing sores.

**SECTION 12: Ecological information****12.1. Toxicity**

Ecological data are not available.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

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

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**12.6. Other adverse effects**

Low hazard to waters.

A pH-change becomes possible in water.

**Further information**

Do not flush into surface water or sanitary sewer system.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Where possible recycling is preferred to disposal.

Can be landfilled after chemical and physical treatment, when in compliance with local regulations.

**Waste disposal number of waste from residues/unused products**

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids  
Classified as hazardous waste.

**Contaminated packaging**

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

**SECTION 14: Transport information****Land transport (ADR/RID)**

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**14.1. UN number:** UN 3264  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrofluoric acid, Sulphuric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8



Classification code: C1  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E2  
Transport category: 2  
Hazard No: 80  
Tunnel restriction code: E

## Inland waterways transport (ADN)


**14.1. UN number:** UN 3264  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrofluoric acid, Sulphuric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8



Classification code: C1  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E2

## Marine transport (IMDG)

**14.1. UN number:** UN 3264  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid and hydrofluoric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Hazard label: 8



Marine pollutant: No  
Limited quantity: 1 L / 30 kg  
Excepted quantity: E2  
EmS: F-A, S-B

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

**14.1. UN number:** UN 3264  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid and hydrofluoric acid, mixture)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II

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Hazard label:

8



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

Handle in accordance with good industrial hygiene and safety practice.

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

The transport takes place only in approved and appropriate packaging.

## SECTION 15: Regulatory information

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

#### EU regulatory information

2004/42/EC (VOC): 0 %

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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 contaminating class (D): 1 - slightly water contaminating

### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative



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LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

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

H290 May be corrosive to metals.

H300 Fatal if swallowed.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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