

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

FINOSTOP Solder Protection Paste

**REF** 42010**Further trade names**

HYDROCHLORIC ACID

Product group: organische Gase  
CAS No: 7647-01-0  
Index No: 017-002-00-2  
EC No: 231-595-7

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

Protection of plastic saddles and teeth during flame soldering of partial dentures.

**Uses advised against**

The present toxicological data do not show any hazardous properties.\*

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

Company name:	FINO GmbH	
Street:	Mangelsfeld 18	
Place:	D-97708 Bad Bocklet	
Telephone:	+49-97 08-90 94 20	Telefax: +49-97 08-90 94 21
e-mail:	info@fino.com	Internet: www.fino.com
Contact person:	Joachim Mahlmeister	Telephone: +49-97 08-90 94 20
e-mail:	info@fino.com	
Responsible Department:	This number can only be reached during our office hours, Monday to Friday from 8 a.m. to 5 p.m.	

**1.4. Emergency telephone number:**

+49-89-1 92 40  
POISON CENTER München  
24 hour(s) 7 day(s)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Acute Tox. 3; H331  
Skin Corr. 1A; H314

Full text of hazard statements: see SECTION 16.

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**2.2. Label elements****Additional advice on labelling**

According to EC directives or the corresponding national regulations the product does not have to be labelled.  
Classification according to Regulation (EC) No 1272/2008 [CLP]

**2.3. Other hazards**

Results of PBT and vPvB assessment not applicable.  
No risks worthy of mention.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

**Chemical characterization**

Watery, inorganic mineral paste with stabilising substances.

Sum formula: H-Cl

Molecular weight: 36,46 g/mol

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7647-01-0	hydrogen chloride			< 3 %
	231-595-7	017-002-00-2		
	Acute Tox. 3, Skin Corr. 1A; H331 H314			

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	
7647-01-0	231-595-7	hydrogen chloride	< 3 %
	inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists)		

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**General information**

None if product is used according to specifications.

Remove affected person from the danger area and lay down.

Do not leave affected person unattended.

**After inhalation**

Remove casualty to fresh air and keep warm and at rest.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Seek medical attention if problems persist.

Product reacts slightly alkaline.

**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**

Foam, Dry extinguishing powder, Carbon dioxide (CO2), Water spray jet

**Unsuitable extinguishing media**

Full water jet

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

If possible remove stored material from the fire area.

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

**5.3. Advice for firefighters**

Not known.

**Additional information**

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

None if used according to specifications.

**For non-emergency personnel**

Emergency procedures

Remove victim out of the danger area. Remove affected person from the danger area and lay down.

Remove persons to safety. The danger areas must be delimited and identified using relevant warning and safety signs.

**For emergency responders**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Use personal protection equipment.

**6.2. Environmental precautions**

No special environmental measures are necessary.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Other information**

Take up mechanically.

Special danger of slipping by leaking/spilling product.

Clear contaminated areas thoroughly.

Wash with plenty of water.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Treat the recovered material as prescribed in the section on waste disposal. Disposal: see section 13

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

No special measures are necessary.

**Advice on protection against fire and explosion**

None if stored and handled according to specifications.

**Advice on general occupational hygiene**

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and after work.

Do not eat, drink or smoke when using this product.

**Further information on handling**

Keep container tightly closed. To prevent drying-out.

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

Store at room temperature.

Keep container tightly closed.  
storage temperature 5-40 °C  
Protect against: Frost

**Hints on joint storage**

Keep away from food, drink and animal feedingstuffs.

**Further information on storage conditions**

No special precautionary measures.

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

This substance/mixture does not contain any components in concentrations of 0,1 %, or higher than either persistent, bioaccumulative and toxic (PBT) or very persistent and are classified as highly bioaccumulative (vPvB).

**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
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

**Additional advice on limit values**

The lists valid during the making were used as basis.

**8.2. Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Use suitable breathing apparatus.

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

goggles  
Face protection shield

**Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The precise time of rupture can be found out from the manufacturer of the protective gloves and must be observed.

**Skin protection**

common occupational protective clothing.

**Respiratory protection**

Use appropriate respiratory protection. Filter type: A2 P2  
If workplace exposure limits are exceeded, respiratory protection must be worn.  
Self-contained respirator (breathing apparatus)

**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state: Paste  
 Colour: blue  
 Odour: odourless

**Test method**
**Changes in the physical state**

Melting point/freezing point: 2000 °C  
 Boiling point or initial boiling point and boiling range: not applicable  
 Softening point: not determined  
 : ASTM D 1015  
 Flash point: not flammable

**Flammability**

ISO 10156

Solid/liquid: not applicable  
 Gas: not applicable

**Explosive properties**

not explosive according to EU A.14

Lower explosion limits: ---  
 Upper explosion limits: ---  
 Auto-ignition temperature: void

**Self-ignition temperature**

Solid: not applicable  
 Decomposition temperature: not applicable

pH-Value: 10

Viscosity / dynamic: 2.000.000 mPa·s  
 (at 20 °C)

Water solubility: not determined

Partition coefficient n-octanol/water: not determined OECD (TG) 117

Vapour pressure: ---  
 (at 20 °C)

Density (at 20 °C): 1,1 g/cm<sup>3</sup>

Bulk density: not determined

Relative vapour density: not determined

**9.2. Other information**
**Information with regard to physical hazard classes**

Sustaining combustion: No data available

Oxidizing properties

Not oxidising.

**Other safety characteristics**

Solvent content: Organic solvents: -, %  
 Maximum VOC content: - %

Solid content: not determined

Evaporation rate: not determined

**Further Information**

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

No information available.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Avoid high temperatures or direct sunlight. Only use the material in places where open light, fire and other flammable sources can be kept away.

**10.5. Incompatible materials**

Oxidizing agent, Acids, alkalines

**10.6. Hazardous decomposition products**

No dangerous decomposition products known.

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in GB CLP Regulation**
**Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7647-01-0	hydrogen chloride				
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0,5 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.

**Specific effects in experiment on an animal**

Toxicological analyses are not available.

**Additional information on tests**

The product is not liable to marking based on the evaluation procedure of the general Directive for Classification of Preparations of the EC in the lasted valid version.  
Product reacts slightly alkaline.

**Practical experience**

No special references.

**11.2. Information on other hazards**

**Other information**

No special precautionary measures.

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

If used and handled pertinently ecological problems are not to expect.

**12.2. Persistence and degradability**

Not applicable.

**12.3. Bioaccumulative potential**

Ecologically harmless.

**12.4. Mobility in soil**

Poorly watersoluble, inorganic product. Can be mechanically precipitated to a large extent in biological sewage plants.

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

This substance does not meet the PBT/vPvB criteria of UK REACH.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

Harmful effects for aquatic organisms are not to expect.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Disposal recommendations**

Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

070199 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; wastes not otherwise specified

**List of Wastes Code - used product**

070199 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; wastes not otherwise specified

**Contaminated packaging**

Non-contaminated packages may be recycled.

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

<b>14.1. UN number or ID number:</b>	UN 0000
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 0000
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

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

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No special measures are necessary.

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

No special precautionary measures.

**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

2004/42/EC (VOC):	no classification
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
Additional information:	0

**Additional information**

According to EC directives or the corresponding national regulations the product does not have to be labelled.  
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**Additional information**

Betriebssicherheitsverordnung (BetrSichV) ---  
No further data.

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**
**Changes**

\* Data changed compared with the previous version.

**Abbreviations and acronyms**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
"IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)"  
ICAO: International Civil Aviation Organization  
"ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)"  
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 (division of the American Chemical Society)  
Acute Tox. 3: Acute toxicity, Hazard Category 3



Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

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

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

**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.

**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Flussmittel	-	20	38	13	6a	7	-	85392-66-1

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories