

SAFETY DATA SHEETS

This SDS packet was issued with item:

071245075

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

0273000007 0273000008 070829424 070829432 071245083 071245091 071317957 071317965 071317973 077109507
077109515 077109523 077109531 077109549 077109564 077109572 077109580 077109598 077109606 077109655
077109663 077109671 077109689 077109697 077109754 077109762 077109770 077109788

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

077109440 077111164 077111172 077111180 077111198

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/03/2012

Reviewed on 12/03/2012

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

- **Product identifier**
- **Trade name:** VOCO Profluorid Varnish
- **Relevant identified uses of the substance or mixture and uses advised against** Non-dental use.
- **Application of the substance / the preparation** Dental varnish
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
VOCO GmbH
Anton-Flettner-Str. 1-3
D-27472 Cuxhaven
- **Information department:** Scientific department tel. +49 (0)4721-719-0
- **Emergency telephone number:** Scientific department tel. +49 (0)4721-719-0

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
.....
Flammable. Contact with acids liberates toxic gas.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Labelling according to EU guidelines:**
- **Safety phrases:**
Keep container tightly closed.
Keep away from sources of ignition - No smoking.
Do not breathe vapour/spray.
Wear suitable protective clothing.
In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
- **NFPA ratings (scale 0 - 4)**

 Health = 0
Fire = 3
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

 Health = 0
Fire = 3
Reactivity = 0
- **Other hazards**
Material should only be used with extreme caution in individuals who may have control over their swallowing reflex (e.g. pre-school children and the disabled).
Use only for intended scope of application

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:**

64-17-5	ethanol	10-25%
7681-49-4	sodium fluoride	2,5-5%

USA

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Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/03/2012

Reviewed on 12/03/2012

Trade name: **VOCO Profluorid Varnish**

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4 First aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:**

Swallowing of larger amounts can lead to nausea, vomiting and/or diarrhoea.

Immediately call a doctor.

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:** Pick up mechanically.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling:**

- **Precautions for safe handling** For dental use only.

- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Do not store together with acids.

- **Further information about storage conditions:**

See storage instructions on package

Keep receptacle tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists that were valid during the creation were used as basis.

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Material Safety Data Sheet

acc. to ISO/DIS 11014

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Reviewed on 12/03/2012

Trade name: VOCO Profluorid Varnish

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not applicable.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Fruit-like
- **pH-value:** Not determined.
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
- **Flash point:** 36°C (97 °F)
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C (68 °F):** 1.02 g/cm³ (8.512 lbs/gal)
- **Solubility in / Miscibility with**

Water:	Not miscible or difficult to mix.
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- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** Contact with acids releases toxic gases.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

7681-49-4 sodium fluoride		
Oral	LD50	52 mg/kg (rat)
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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Printing date 12/03/2012

Reviewed on 12/03/2012

Trade name: VOCO Profluorid Varnish

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- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

• **Aquatic toxicity:** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Water hazard class 1 (Self-assessment): slightly hazardous for water

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

• **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

• **DOT, ADR, IMDG, IATA** UN1170

- **UN proper shipping name**

• **DOT, IATA** ETHANOL SOLUTION

• **ADR** 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

• **IMDG** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

- **Transport hazard class(es)**

- **DOT**



• **Class** 3 Flammable liquids.

• **Label** 3

- **ADR, IMDG, IATA**



• **Class** 3 Flammable liquids

• **Label** 3

• **DOT, ADR, IMDG, IATA II**

• **Marine pollutant:** No

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Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/03/2012

Reviewed on 12/03/2012

Trade name: **VOCO Profluorid Varnish**

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- **Danger code (Kemler):** 33
- **EMS Number:** F-E,S-E

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

Contact Voco for more information

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed

- **Cancerogenity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients are listed

- **TLV (Threshold Limit Value established by ACGIH)**

7681-49-4 sodium fluoride

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

Contact VOCO for more information.

- **Canadian Ingredient Disclosure list (limit 1%)**

7681-49-4 sodium fluoride

- **Product related hazard informations:**

- **Hazard-determining components of labelling:**

sodium fluoride

- **Risk phrases:**

Flammable.

Contact with acids liberates toxic gas.

- **Safety phrases:**

Keep container tightly closed.

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Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 12/03/2012

Reviewed on 12/03/2012

Trade name: VOCO Profluorid Varnish

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*Keep away from sources of ignition - No smoking.**Do not breathe vapour/spray.**Wear suitable protective clothing.**In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.***16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Scientific department

· **Contact:** Tel.: +49 (0)4721-719-0

—USA—

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/08/2015

Reviewed on 05/08/2015

1 Identification

- **Product identifier**
- **Trade name:** *VOCO Profluorid Varnish*
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** *Dental varnish*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
VOCO GmbH
Anton-Flettner-Str. 1-3
D-27472 Cuxhaven
- **Information department:** *Scientific department tel. +49 (0)4721-719-0*
- **Emergency telephone number:** *Scientific department tel. +49 (0)4721-719-0*

2 Hazard(s) identification

Health effects are based on the unmixed uncured material.
Under FDA regulations this product is classified as a medical device.
Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (HCS).

- **Classification of the substance or mixture**



Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**
- **Hazard pictograms** *GHS02, GHS07*
- **Signal word** *Warning*
- **Hazard statements**
Flammable liquid and vapour.
Harmful if swallowed.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wear protective gloves / eye protection.
Wear protective clothing.
Avoid breathing vapours.
IF SWALLOWED: Call a doctor if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
Material should only be used with extreme caution in individuals who may have control over their swallowing reflex (e.g. pre-school children and the disabled).
Use only for intended scope of application
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

Dangerous components:

64-17-5	ethanol	10-25%
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USA

Printing date 05/08/2015

Reviewed on 05/08/2015

Trade name: **VOCO Profluorid Varnish**

7681-49-4 sodium fluoride

(Contd. of page 1)

2,5-5%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Swallowing of larger amounts can lead to nausea, vomiting and or diarrhoea.
Immediately call a doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters** No further relevant information available.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers, surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** For dental use only.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
See storage instructions on package
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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Safety Data Sheet

acc. to OSHA HCS

Printing date 05/08/2015

Reviewed on 05/08/2015

Trade name: **VOCO Profluorid Varnish**

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Control parameters

Components with limit values that require monitoring at the workplace:

64-17-5 ethanol (10-25%)

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.

Protection of hands: Not required.

Material of gloves: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Fruit-like

pH-value: Not determined.

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: 36 °C (97 °F)

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density at 20 °C (68 °F): 1.02 g·cm³ (8.512 lbs/gal)

Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Other information: No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: Contact with acids releases toxic gases.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

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Safety Data Sheet

acc. to OSHA HCS

Printing date 05/08/2015

Reviewed on 05/08/2015

Trade name: *VOCO Profluorid Varnish*

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11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

7681-49-4 sodium fluoride

Oral LD50 52 mg/kg (rat)

· Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

The component 64-17-5 Ethanol is listed by IARC as Group 1 but in alcoholic beverages consumption only. This product is not an alcoholic beverage.

	fumed silica	
7681-49-4	sodium fluoride	3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity: No further relevant information available.

· Persistence and degradability: No further relevant information available.

· Bioaccumulative potential: No further relevant information available.

· Mobility in soil: No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects: No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

USA

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/08/2015

Reviewed on 05/08/2015

Trade name: *VOCO Profluorid Varnish*

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14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	UN1170
· UN proper shipping name	
· DOT	Ethanol
· ADR	1170 Ethanol (Ethyl alcohol)
· IMDG	ETHANOL (ETHYL ALCOHOL)
· IATA	ETHANOL
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
· ADR, IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN1170, Ethanol (Ethyl alcohol), 3, III

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture	
· Sara	
· Section 355 (extremely hazardous substances):	
	None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):	
	None of the ingredients are listed.
· TSCA (Toxic Substances Control Act):	
	All ingredients are listed.
· Proposition 65	
· Chemicals known to cause cancer:	
	None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for females:	
	None of the ingredients are listed.

(Contd. on page 6)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/08/2015

Reviewed on 05/08/2015

Trade name: **VOCO Profluorid Varnish**

(Contd. of page 5)

· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients are listed		
· Chemicals known to cause developmental toxicity:		
64-17-5	ethanol	
· Cancerogenity categories		
· EPA (Environmental Protection Agency)		
None of the ingredients are listed		
· TLV (Threshold Limit Value established by ACGIH)		
64-17-5	ethanol	A3
7681-49-4	sodium fluoride	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients are listed		
· GHS label elements		
The product is classified and labeled according to the Globally Harmonized System (GHS).		
· Hazard pictograms GHS02, GHS07		
· Signal word Warning		
· Hazard statements		
Flammable liquid and vapour.		
Harmful if swallowed.		
· Precautionary statements		
Keep away from heat/sparks/open flames/hot surfaces. No smoking.		
Wear protective gloves / eye protection.		
Wear protective clothing.		
Avoid breathing vapours.		
IF SWALLOWED: Call a doctor if you feel unwell.		
Dispose of contents/container in accordance with local/regional/national/international regulations.		

16 Other information

The information contained herein is based on our present knowledge and is believed to be correct at the date issued. The information is subject to change without notice. However, all information, statements, recommendations or suggestions shall not constitute any guarantee, representation or warranty, expressed or implied.

Final determination whether the product is fit and suitable for a particular purpose and the user's method of use or application is the sole responsibility of the user.

· **Department issuing MSDS:** Scientific department

· **Contact:** Tel.: +49 (0)4721-719-0

· **Date of preparation / last revision:** 05/08/2015 22

· **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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

USA