1 Identification

- **Product identifier**
  - **Trade name**: VOCO Profluorid Varnish
  - **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 vapor.

- **Acute Tox. 4 H302 Harmful if swallowed.**

- **Label elements**
  - **Hazard pictograms**: GHS02, GHS07
  - **Signal word**: Warning
  - **Hazard statements**
    - Flammable liquid and vapor.
    - Harmful if swallowed.
  - **Precautionary statements**
    - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
    - Avoid breathing vapours.
    - Wear protective gloves / eye protection.
    - Wear protective clothing.
    - 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**:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Characterization</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>Flam. Liq. 2, H225</td>
<td>10-25%</td>
</tr>
</tbody>
</table>
Trade name: VOCO Profluorid Varnish

| 7681-49-4 sodium fluoride | Acute Tox. 3, H301 | Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 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.

- Information for 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

- 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.

- 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.

- 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.

- 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: No further relevant information available.
- 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.
**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.
    - 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.
  - Behavior in environmental systems:
    - 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.
### 14 Transport information

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>UN1170</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT, ADR, IMDG, IATA</strong></td>
<td>UN1170</td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>Ethanol</td>
</tr>
<tr>
<td><strong>DOT</strong></td>
<td>1170 Ethanol</td>
</tr>
<tr>
<td><strong>ADR</strong></td>
<td>ETHANOL (ETHYL ALCOHOL)</td>
</tr>
<tr>
<td><strong>IMDG</strong></td>
<td>ETHANOL</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>ETHANOL</td>
</tr>
</tbody>
</table>

- **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
  - **Stowage Category** A

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **UN "Model Regulation":** UN 1170 ETHANOL, 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.
Trade name: Voco Profluorid Varnish

- **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:**
  64-17-5 ethanol

- **Carcinogenicity categories**
  None of the ingredients are listed

- **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 vapor.
  Harmful if swallowed.

- **Precautionary statements**
  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  Avoid breathing vapours.
  Wear protective gloves / eye protection.
  Wear protective clothing.
  IF SWALLOWED: Call a doctor if you feel unwell.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

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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 SDS:** Scientific department
- **Contact:** Tel.: +49 (0) 721-719-0
- **Date of preparation / last revision:** 10/11/2019 / 21

**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 Abstract Service (Division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value

(Contd. on page 7)
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids – Category 2</td>
</tr>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids – Category 3</td>
</tr>
<tr>
<td>Acute Tox. 3</td>
<td>Acute toxicity – Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity – Category 4</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation – Category 2</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation – Category 2</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.