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

1.1 Product identifier
Trade name: AGC Conductive lacquer Switch

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Ivoclar Vivadent AG
Bendererstrasse 2
LI-9494 Schaan
PRINCIPALITY OF LIECHTENSTEIN
Tel: +423 235 35 35
Fax: +423 235 33 60

Further information obtainable from:
Regulatory Affairs
sds@ivoclarvivadent.com

1.4 Emergency telephone number: +423 / 235 33 13 (Ivoclar Vivadent AG, LI-9494 Schaan, Liechtenstein)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2 H319 Causes serious eye irritation.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS09

Signal word Danger

Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

(Contd. on page 2)
Trade name: **AGC Conductive lacquer Switch**

\[\text{vPoB: Not applicable.}\]

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**SECTION 3: Composition/information on ingredients**

\[\text{3.2 Chemical characterisation: Mixtures}\]

\[\text{Description: Mixture of substances listed below with nonhazardous additions.}\]

\[\text{Dangerous components:}\]

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>Hazard Phrases</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4</td>
<td>silver</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td>25-50%</td>
</tr>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td>10-25%</td>
</tr>
<tr>
<td>141-78-6</td>
<td>ethyl acetate</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td>10-25%</td>
</tr>
<tr>
<td>9004-70-0</td>
<td>cellulose nitrate damped with 2-propanol</td>
<td>Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td>≤10%</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-butyl acetate</td>
<td>Flam. Liq. 3, H226; STOT SE 3, H336</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>Flam. Liq. 2, H225</td>
<td>0.1-&lt;2.5%</td>
</tr>
</tbody>
</table>

\[\text{Additional information: For the wording of the listed hazard phrases refer to section 16.}\]

---

**SECTION 4: First aid measures**

\[\text{4.1 Description of first aid measures}\]

\[\text{General information: Immediately remove any clothing soiled by the product.}\]

\[\text{After inhalation:}\]

Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.

\[\text{After skin contact:}\]

Rinse with water.
If skin irritation continues, consult a doctor.

\[\text{After eye contact:}\]

Rinse opened eye for several minutes under running water. Then consult a doctor.

\[\text{After swallowing:}\]

Rinse out mouth and then drink plenty of water.
Seek medical treatment.

\[\text{4.2 Most important symptoms and effects, both acute and delayed}\]

No further relevant information available.

\[\text{4.3 Indication of any immediate medical attention and special treatment needed}\]

No further relevant information available.

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**SECTION 5: Firefighting measures**

\[\text{5.1 Extinguishing media}\]

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

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

No further relevant information available.
5.3 Advice for firefighters

- Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
- 6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  - Only adequately trained personnel should handle this product.
  - For use in dentistry only.
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
    - Information about storage in one common storage facility: Not required.
    - Information about storage conditions: Keep container tightly sealed.
    - Store receptacle in a well ventilated area.
    - Protect from heat and direct sunlight.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredient</th>
<th>WEL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
<td>Short-term: 1250 mg/m³, 500 ppm</td>
<td>Long-term: 999 mg/m³, 400 ppm</td>
<td></td>
</tr>
<tr>
<td>141-78-6</td>
<td>ethyl acetate</td>
<td>Short-term: 400 ppm</td>
<td>Long-term: 200 ppm</td>
<td></td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-butyl acetate</td>
<td>Short-term: 966 mg/m³, 200 ppm</td>
<td>Long-term: 724 mg/m³, 150 ppm</td>
<td></td>
</tr>
</tbody>
</table>
Trade name: AGC Conductive lacquer Switch

<table>
<thead>
<tr>
<th>CAS: 67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 64-17-5 ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
</tr>
</tbody>
</table>

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

8.2 Exposure controls

- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    Usual hygienic measures for dental practice and dental laboratories.
    Immediately remove all soiled and contaminated clothing.
    Keep away from foodstuffs, beverages and feed.
    Wash hands before breaks and at the end of work.
    Avoid contact with the eyes and skin.
  - **Respiratory protection:**
    Not necessary if room is well-ventilated.
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - **Protection of hands:**
    Protective gloves (EN 374)
    After use of gloves apply skin-cleaning agents and skin cosmetics.
  - **Material of gloves**
    Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Penetration time of glove material**
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:**
    Tightly sealed goggles (EN 166)
  - **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Fluid
      - Colour: Red
    - **Odour:** Characteristic
    - **Odour threshold:** Not determined.
    - **pH-value:** Not applicable.
    - **Change in condition**
      - Melting point/freezing point: Undetermined.

(Contd. on page 5)
Trade name: AGC Conductive lacquer Switch

<table>
<thead>
<tr>
<th>Initial boiling point and boiling range: Undetermined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Flash point: -18 °C</td>
</tr>
<tr>
<td>- Flammability (solid, gas): Not applicable.</td>
</tr>
<tr>
<td>- Auto-ignition temperature: Product is not selfigniting.</td>
</tr>
<tr>
<td>- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</td>
</tr>
<tr>
<td>- Explosion limits:</td>
</tr>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
<tr>
<td>- Vapour pressure: Not determined.</td>
</tr>
<tr>
<td>- Density: Not determined.</td>
</tr>
<tr>
<td>- Relative density: Not determined.</td>
</tr>
<tr>
<td>- Vapour density: Not determined.</td>
</tr>
<tr>
<td>- Evaporation rate: Not determined.</td>
</tr>
<tr>
<td>- Solubility in / Miscibility with water: Fully miscible.</td>
</tr>
<tr>
<td>- Partition coefficient: n-octanol/water: Not miscible.</td>
</tr>
<tr>
<td>- Viscosity:</td>
</tr>
<tr>
<td>Dynamic: Not determined.</td>
</tr>
<tr>
<td>Kinematic: Not determined.</td>
</tr>
<tr>
<td>- Solvent content:</td>
</tr>
<tr>
<td>Organic solvents: 43.0 %</td>
</tr>
<tr>
<td>- 9.2 Other information No further relevant information available.</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability Stable under normal handling and storage conditions.
- 10.3 Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: None under normal conditions of storage and use.
- 10.6 Hazardous decomposition products: None under normal conditions of storage and use.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity Based on available data, the classification criteria are not met.
  - Skin corrosion/irritation Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
  - Germ cell mutagenicity Based on available data, the classification criteria are not met.
  - Carcinogenicity Based on available data, the classification criteria are not met.
  - Reproductive toxicity 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.
 SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- 12.4 Mobility in soil: No further relevant information available.
- Ecotoxicological effects:
  - Remark: Very toxic for fish
- Additional ecological information:
  - General notes:
    - Very toxic for aquatic organisms
    - Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    - Do not allow product to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects: No further relevant information available.

 SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation:
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
    - Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
  - Uncleaned packaging:
    - Recommendation: Disposal must be made according to official regulations.

 SECTION 14: Transport information

- 14.1 UN-Number
  - ADR/RID/ADN, IMDG, IATA: UN1993
- 14.2 UN proper shipping name
  - ADR/RID/ADN: 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS
  - IMDG, IATA: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL))
- 14.3 Transport hazard class(es)
  - ADR/RID/ADN: 3 (F1) Flammable liquids.
### Safety data sheet

**Trade name:** AGC Conductive lacquer Switch

<table>
<thead>
<tr>
<th>Label</th>
<th>3</th>
</tr>
</thead>
</table>
| IMDG  | ![IMDG](image)
| Class | 3 Flammable liquids. |
| Label | 3 |
| IATA  | ![IATA](image)
| Class | 3 Flammable liquids. |
| Label | 3 |

#### 14.4 Packing group
- ADR/RID/ADN, IMDG, IATA: II

#### 14.5 Environmental hazards:
- Product contains environmentally hazardous substances:
  - **Marine pollutant:**
    - Symbol (fish and tree)
  - **Special marking (ADR/RID/ADN):**
    - Symbol (fish and tree)

#### 14.6 Special precautions for user
- **Warning:** Flammable liquids.
  - **Danger code (Kemler):** 33
  - **EMS Number:** F-E,S-E
  - **Stowage Category:** B

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
- **Not applicable.**

#### Transport/Additional information:
- **ADR/RID/ADN**
  - **Limited quantities (LQ):** 1L
  - **Excepted quantities (EQ):** Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml
  - **Transport category:** 2
  - **Tunnel restriction code:** D/E

- **IMDG**
  - **Limited quantities (LQ):** 1L
  - **Excepted quantities (EQ):** Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation":**
  - UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II, ENVIRONMENTALLY HAZARDOUS
SECTION 15: Regulatory information

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

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
  E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

- Relevant phrases
  H225 Highly flammable liquid and vapour.
  H226 Flammable liquid and vapour.
  H319 Causes serious eye irritation.
  H336 May cause drowsiness or dizziness.
  H400 Very toxic to aquatic life.
  H410 Very toxic to aquatic life with long lasting effects.

- Classification according to Regulation (EC) No 1272/2008
  The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- 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 Harmonised 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)
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Flam. Liq. 3: Flammable liquids – Category 3
  Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1