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

1.1 Product identifier

Trade name: IPS Model Sealer

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture Auxiliar for manufacture of dental prothesis

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Ivoclar Vivadent AG
Bendererstrasse 2
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, 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.
STOT SE 3 H336 May cause drowsiness or dizziness.

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

Signal word Danger

Hazard-determining components of labelling:
ethyl acetate

Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Additional information:
EUH066 Repeated exposure may cause skin dryness or cracking.

(Contd. on page 2)
 SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS: 141-78-6</th>
<th>ethyl acetate</th>
<th>50-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 205-500-4</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 9004-70-0</th>
<th>cellulose nitrate damped with 2-propanol</th>
<th>10-&lt;25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 205-500-4</td>
<td>Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td></td>
</tr>
</tbody>
</table>

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

 SECTION 4: First aid measures

4.1 Description of first aid measures
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
  If symptoms persist, consult a doctor.
- **After swallowing:** Rinse out mouth and then drink plenty of water.
  If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed **No further relevant information available.**

4.3 Indication of any immediate medical attention and special treatment needed **No further relevant information available.**

 SECTION 5: Firefighting measures

5.1 Extinguishing media
- **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray.
- **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.
- **Additional information:** Cool endangered receptacles with water spray.

 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).**

(Contd. on page 3)
Trade name: IPS Model Sealer

Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

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
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.

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>141-78-6 ethyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
<td>Short-term value: 400 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 200 ppm</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.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Respiratory protection:
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.
Filter A

(Contd. on page 4)
Trade name: IPS Model Sealer

Protection of hands:
Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves
Butyl rubber, BR
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.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information
Appearance:
Form: Fluid
Colour: Colourless
Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not determined.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 77 °C

Flash point: -1 °C
Ignition temperature: 460 °C
Auto-ignition temperature: Product is not selfigniting.

Explosive properties:
Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:
Lower: 2.1 Vol %
Upper: 11.5 Vol %

Vapour pressure at 20 °C: 97 hPa
Density at 20 °C: 0.989 g/cm³
Trade name: **IPS Model Sealer**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity: Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>9.2 Other information</td>
<td>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.
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**: Reacts with strong oxidising agents.
- **10.4 Conditions to avoid**: No further relevant information available.
- **10.5 Incompatible materials**: No further relevant information available.
- **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.
  - **LD/LC50 values relevant for classification**:
    - **CAS: 141-78-6 ethyl acetate**
      - Oral LD50 5620 mg/kg (rat)
    - **CAS: 141-78-6 ethyl acetate**
      - Dermal LD50 > 18000 mg/kg (rabbit)
  - **Skin corrosion/irritation**: Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation**: Causes serious eye irritation.
  - **Respiratory or skin sensitisation**: Based on available data, the classification criteria are not met.
  - **Additional toxicological information**: No further relevant information available.
  - **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**: May cause drowsiness or dizziness.
  - **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.

(Contd. on page 6)
SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 141-78-6 ethyl acetate
LC50/96 h 212 mg/l (fish) (Min.)
328 mg/l (fish) (Median)
484 mg/l (fish) (Max.)

CAS: 141-78-6 ethyl acetate
LC50/48 h 154 mg/l (crustaceans) (Min.)
1600 mg/l (crustaceans) (Max.)
679 mg/l (crustaceans) (Median)

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.

Additional ecological information:

General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPoB: 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.

European waste catalogue
20 01 13* solvents

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
ADR/RID/ADN, IMDG, IATA 1173

14.2 UN proper shipping name
ADR/RID/ADN 1173 ETHYL ACETATE
IMDG, IATA ETHYL ACETATE
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.06.2019
Version number 9
Revision: 26.06.2019

Trade name: IPS Model Sealer

14.3 Transport hazard class(es)
- ADR/RID/ADN

- Class 3 (F1) Flammable liquids.
- Label 3

- IMDG, IATA

- Class 3 Flammable liquids.
- Label 3

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

14.5 Environmental hazards:
- Marine pollutant: No

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

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

14.8 Transport/Additional information:
- ADR/RID/ADN
- Limited quantities (LQ) LQ4
- Transport category 2
- Tunnel restriction code D/E

- UN "Model Regulation": UN1173, ETHYL ACETATE, 3, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - 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.
  H319 Causes serious eye irritation.
  H336 May cause drowsiness or dizziness.
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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 2: Flammable liquids – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.