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

1.1 Product identifier

Trade name: IPS Margin 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 Auxiliary for manufacture of dental prosthesis

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Ivoclar Vivadent AG
Bendererstrasse 2
FL-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, FL-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.
Skin Irrit. 2 H315 Causes skin irritation.
Repr. 2 H361f Suspected of damaging fertility.
STOT SE 3 H336 May cause drowsiness or dizziness.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 2 H411 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  GHS08  GHS09

Signal word Danger

Hazard-determining components of labelling:
n-hexane

Hazard statements
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.

(Contd. on page 2)
Trade name: IPS Margin Sealer

H411 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.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
  - P233 Keep container tightly closed.
  - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
  - P331 Do NOT induce vomiting.

- **Labelling of packages where the contents do not exceed 125 ml**

- **Signal word** Danger

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

- **Hazard statements**
  - H361f Suspected of damaging fertility.
  - H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**
  - P201 Obtain special instructions before use.
  - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
  - P331 Do NOT induce vomiting.
  - P405 Store locked up.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

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

- **3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

<table>
<thead>
<tr>
<th>CAS: 110-54-3</th>
<th>n-hexane</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 203-777-6</td>
<td>Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336</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.
  - Seek medical treatment.
  - In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**
  - Immediately rinse with water.

- **After eye contact:**
  - Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**
  - Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**

(Contd. on page 3)
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:
  - Inform respective authorities in case of seepage into water course or sewage system.
  - 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).
  - Dispose contaminated material as waste according to item 13.
  - 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:

CAS: 110-54-3 n-hexane
WEL Long-term value: 72 mg/m³, 20 ppm

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.
Avoid contact with the skin.
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.

Recommended filter device for short term use:
Filter A1
Filter A2
Filter A3

Protection of hands:

Protective gloves

After use of gloves apply skin-cleaning agents and skin cosmetics.
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
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)
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:
  - Odour threshold: Not determined.
- pH-value: Not determined.

- Change in condition:
  - Melting point/Melting range: -95 °C
  - Boiling point/Boiling range: 69 °C
- Flash point: -26 °C
- Ignition temperature: 240 °C
- Self-igniting: Product is not self-igniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  - Lower: 1.2 Vol %
  - Upper: 7.4 Vol %

- Vapour pressure at 20 °C: 160 hPa
- Density at 20 °C: 0.65 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Insoluble.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

9.2 Other information
- No further relevant information available.

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
- 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: 110-54-3 n-hexane**
    - Oral LD50 28710 mg/kg (rat)
    - Dermal LD50 >2000 mg/kg (rabbit)
- **Skin corrosion/irritation**
  - Causes skin irritation.
- **Serious eye damage/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.
- **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**
  - Suspected of damaging fertility.
- **STOT-single exposure**
  - May cause drowsiness or dizziness.
- **STOT-repeated exposure**
  - May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard**
  - May be fatal if swallowed and enters airways.

**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:** Toxic for fish
- **Additional ecological information:**
  - **General notes:**
    - Also poisonous for fish and plankton in water bodies.
    - 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.
    - Danger to drinking water if even small quantities leak into the ground.
- **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.
### SECTION 14: Transport information

- **14.1 UN-Number**
  - ADR, RID, ADN, IMDG, IATA: 1208

- **14.2 UN proper shipping name**
  - ADR/RID/ADN: 1208 HEXANES
  - IMDG, IATA: HEXANES

- **14.3 Transport hazard class(es)**
  - ADR/RID/ADN
    - Class 3 (F1) Flammable liquids.
    - Label 3

- **IMDG**
  - Class 3 Flammable liquids.
  - Label 3

- **IATA**
  - 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: n-hexane
  - Marine pollutant: Yes
    - Symbol (fish and tree)
    - 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-D

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.
Trade name: IPS Margin Sealer

Transport/Additional information:

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

**UN "Model Regulation":**

UN1208, HEXANES, ENVIRONMENTALLY HAZARDOUS, 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.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

**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
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

* Data compared to the previous version altered.