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

1.1 Product identifier

Trade name: SR Retentions Adhesive

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 prothesis

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.
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:
acetone

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.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P233 Keep container tightly closed.
P312 Call a POISON CENTER/doctor if you feel unwell.
P404 Store in a closed container.

(Contd. on page 2)
**Safety data sheet**

according to 1907/2006/EC, Article 31

Printing date 29.04.2015          Version number 9          Revision: 18.04.2015

**Trade name:** SR Retentions Adhesive

- **Additional information:**
  EUH066 Repeated exposure may cause skin dryness or cracking.
- **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:**
    | CAS      | EINECS |    |     |
    |----------|--------|----|-----|
    | 67-64-1  | 200-662-2 |    |   |
    - **acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 50-100%**
  - **Additional information:** For the wording of the listed risk phrases refer to section 16.

*SECTION 4: First aid measures*

- **4.1 Description of first aid measures**
  - **General information:** Immediately remove any clothing soiled by the product.
  - **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:** Wash with water and acidic soap.
  - **After eye contact:** Rinse opened eye for several minutes under running water. Then 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 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.
  - **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).
  Ensure adequate ventilation.

(Contd. on page 3)
SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **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.
- **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:**
  67-64-1 acetone
  - **WEL** Short-term value: 3620 mg/m³, 1500 ppm
  - **Long-term value:** 1210 mg/m³, 500 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.
    Wash hands before breaks and at the end of work.
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing
    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.
  - **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
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: Yellow tint
Odour: Acetone-like
Odour threshold: Not determined.

pH-value: Not determined.

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 55 °C

Flash point: -19 °C

Ignition temperature: 465 °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: 2.6 Vol %
Upper: 13.0 Vol %

Vapour pressure at 20 °C: 233 hPa

Density: Not determined.
Relative density: Not determined.
Vapour density: Not determined.
Evaporation rate: Not determined.

Solubility in / Miscibility with water: Partly miscible.

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

Viscosity:
Dynamic: Not determined.
Kinematic: Not determined.
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 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:
    - LD/LC50 values relevant for classification:
      - 67-64-1 acetone
        - Oral LD50 5800 mg/kg (rat)
        - Dermal LD50 20000 mg/kg (rabbit)
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: Irritating effect.
    - Sensitisation: No sensitising effects known.
    - Additional toxicological information: No further relevant information available.

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.
- Additional ecological information:
  - General notes:
    - Water hazard class 1 (German Regulation) (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.
- 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.
Business

Trade name: **SR Retentions Adhesive**

- **European waste catalogue**
- 18 01 06* chemicals consisting of or containing dangerous substances
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

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**SECTION 14: Transport information**

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<tr>
<td>14.2 UN proper shipping name</td>
<td>1090 ACETONE</td>
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<td>14.3 Transport hazard class(es)</td>
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<td>14.5 Environmental hazards:</td>
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<td>- Marine pollutant:</td>
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<td>- EMS Number:</td>
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<td>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
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<td>- Tunnel restriction code</td>
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<td>- UN &quot;Model Regulation&quot;:</td>
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(Contd. on page 7)
Trade name: SR Retentions Adhesive

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  No further relevant information available.
· 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
  Flam. Liq. 2: Flammable liquids, Hazard Category 2
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
· * Data compared to the previous version altered.