

**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 06/28/2019

Version number 9

Reviewed on 06/26/2019

**1 Identification**

- **Product identifier**
- **Trade name: *IPS Model Sealer***
- **Application of the substance / the mixture** *Auxiliary for manufacture of dental prosthesis*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Ivoclar Vivadent Inc.*  
*175 Pineview Drive, Amherst, N.Y. 14228*  
*USA*  
*Tel. +1 800 533 6825*  
*Fax +1 716 691 2285*
  
- Ivoclar Vivadent Inc.*  
*1-6600 Dixie Road*  
*Mississauga, Ontario*  
*L5T 2Y2*  
*Canada*  
*Phone: +1 905 670 8499*  
*Fax: +1 905 670 3102*
- **Information department:** *Quality Assurance / Regulatory Affairs*
- **Emergency telephone number:**  
*24 Hour Emergency Assistance:*  
*Emergency-Call USA - Infotrac: 1-800-535-5053*  
*Emergency-Call Canada - Canutec: 1-613-996-6666*
  
- General SDS Assistance:*  
*US: 1-800-533-6825*  
*Canada: 1-800-263-8182*

**2 Hazard identification**

- **Classification of the substance or mixture**

<i>Flammable Liquids - Category 2</i>	<i>H225 Highly flammable liquid and vapour.</i>
<i>Eye Irritation - Category 2A</i>	<i>H319 Causes serious eye irritation.</i>
<i>Specific Target Organ Toxicity - Single Exposure - Category 3</i>	<i>H336 May cause drowsiness or dizziness.</i>

- **Label elements**
- **GHS label elements**  
*The product is classified and labeled according to the Globally Harmonized System (GHS).*

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*ethyl acetate*  
*cellulose nitrate damped with 2-propanol*
- **Hazard statements**  
*Highly flammable liquid and vapour.*

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Causes serious eye irritation.

May cause drowsiness or dizziness.

**· Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

**· Classification system:**

**· NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 1

**· HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 1

### 3 Composition/Information on ingredients

**· Chemical characterization: Mixtures**

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

**· Dangerous components:**

CAS: 141-78-6	ethyl acetate	60-100% w/w *
CAS: 9004-70-0	cellulose nitrate damped with 2-propanol	15-<20% w/w *

\* Actual concentration ranges are withheld as a trade secret.

### 4 First aid measures

**· 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.

**· 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.

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### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

### 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:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **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 receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Store receptacle in a well ventilated area.
- **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.

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· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 141-78-6 ethyl acetate**

EL Long-term value: 150 ppm

EV Long-term value: 1,440 mg/m<sup>3</sup>, 400 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **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.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Filter A

· **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

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid

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· <b>Color:</b>	Colorless
· <b>Odor:</b>	Characteristic
· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	77 °C
· <b>Flash point:</b>	-1 °C
· <b>Ignition temperature:</b>	460 °C
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	2.1 Vol %
· <b>Upper:</b>	11.5 Vol %
· <b>Vapor pressure at 20 °C:</b>	97 hPa
· <b>Density at 20 °C:</b>	0.989 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal handling and storage conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** None under normal conditions of storage and use.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

CAS: 141-78-6 ethyl acetate

Oral	LD50	5620 mg/kg (rat)
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**CAS: 141-78-6 ethyl acetate**

Dermal LD50 > 18000 mg/kg (rabbit)

- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** No further relevant information available.
- **Carcinogenic categories**

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

· **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)

- **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 2 (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.
- **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.

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### 14 Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· DOT/TDG</li> <li>· ADR, IMDG, IATA</li> </ul>	<p style="margin: 0;">UN1173 1173</p>	
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· DOT/TDG, IMDG, IATA</li> <li>· ADR</li> </ul>	<p style="margin: 0;">ETHYL ACETATE 1173 ETHYL ACETATE</p>	
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· DOT/TDG (Transport dangerous goods):</li> </ul>	<div style="text-align: center; margin-bottom: 10px;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p style="margin: 0;">3 Flammable liquids 3</p>
<ul style="list-style-type: none"> <li>· ADR</li> </ul>	<div style="text-align: center; margin-bottom: 10px;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p style="margin: 0;">3 (F1) Flammable liquids 3</p>
<ul style="list-style-type: none"> <li>· IMDG, IATA</li> </ul>	<div style="text-align: center; margin-bottom: 10px;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p style="margin: 0;">3 Flammable liquids 3</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· DOT/TDG, ADR, IMDG, IATA</li> </ul>	<p style="margin: 0;">II</p>	
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> </ul>	<p style="margin: 0;">No</p>	
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> </ul>	<p style="margin: 0;">Warning: Flammable liquids 33 F-E,S-E</p>	
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	<p style="margin: 0;">Not applicable.</p>	
<ul style="list-style-type: none"> <li>· UN "Model Regulation":</li> </ul>	<p style="margin: 0;">UN1173, ETHYL ACETATE, 3, II</p>	

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### 15 Regulatory information

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

· <b>Section 355 (extremely hazardous substances):</b>
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None of the ingredients is listed.
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· <b>Section 313 (Specific toxic chemical listings):</b>
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None of the ingredients is listed.
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· <b>TSCA (Toxic Substances Control Act):</b>
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CAS: 141-78-6 ethyl acetate
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- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02    GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

ethyl acetate

cellulose nitrate damped with 2-propanol

- **Hazard statements**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

- **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

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

### 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.

- **Date of the latest revision of the safety data sheet** 06/28/2019 / 8

- **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- **\* Data compared to the previous version altered.**