

## Safety Data Sheet

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

**1.1 Product identifier** **PEARL ADHESIVE**

**UFI code:** E5XR-S0MU-JH19-Y4YJ

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

Product is used for bonding pearls of polystyrene on the wax model.

**1.3 Details of the supplier of the safety data sheet**

		<i>Production:</i>
Manufacturer/Supplier:	INTERDENT d.o.o.	INTERDENT d.o.o.
Street:	Opekarniška cesta 26	Dol 1
Country code /Postal code/City:	SI-3000 Celje	SI-3342 Gornji Grad
Telephone:	+386(0) 425-62-00	
Fax:	+368(0) 490-62-02	

**1.4 Emergency telephone number**

Emergency phone: 112 (EU)  
+386(0) 425-62-00 (Mon. – Fri-: 8.00 – 16.00)

### **SECTION 2: Hazards Identification**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008:

Hazard class	Hazard category	Hazard statements
Flammable liquids	Hazard Category 2	H225 Highly flammable liquid and vapour.
Aspiration hazard	Hazard Category 1	H304 May be fatal if swallowed and enters airways.
Sensitization — Skin	Hazard Category 1	H317 May cause an allergic skin reaction.
Specific target organ toxicity – Single exposure	Hazard Category 3, Narcosis	H336 May cause drowsiness or dizziness.
Specific target organ toxicity – Repeated exposure	Hazard Category 2	H373 May cause damage to organs
Hazardous to the aquatic environment– Chronic Hazard	Chronic Hazard, Category 2	H411 Toxic to aquatic life with long lasting effects.

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### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008:

#### Hazard pictograms:



**Signal word: DANGER**

#### Hazard statements:

H317 May cause an allergic skin reaction.  
H225 Highly flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.  
H373 May cause damage to organs  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statement:

*Preventions:*

P280 Wear protective gloves/eye protection.  
P261 Avoid breathing mist/vapours.  
P264 Wash hands thoroughly after handling.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P233 Keep container tightly closed.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P271 Use only outdoors or in a well-ventilated area.

*Response:*

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P370 + P378 In case of fire: Use dry sand, dry chemicals, or alcohol-resistant foam to extinguish.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P312 Call a POISON CENTRE/doctor if you feel unwell.  
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
 P331 Do NOT induce vomiting.

### *Disposal*

P501 Dispose of contents/containers in accordance with local regulation.

### **Component on the label:**

Colophony; Hydrocarbons C6-C7, isoalkanes, cyclical, <5% n-hexane; acetone

### **2.3 Other hazards**

PBT and vPvB evaluations are in section 12.5.

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

### **3.1 Substance**

See section 3.2

### **3.2 Mixture**

Chemical name	CAS Nr. EC-Number INDEX number REACH number	%	Classification according to EC 1272/2008	
			Hazardous class/hazardous category	Hazardous phrases
Colophony	8050-09-7 232-475-7 650-015-00-7 01-2119480418-32	20-30	Skin.Sens. 1	H317
Hydrocarbons C6-C7, isoalkanes, cyclical, <5% n-hexane	- 926-605-8 - 01-2119486291-36	10-20	Flam. Liq.2 STOT SE 3  Asp.Tox.1 Aquatic Chronic 2	H225 H336 H304 H411
Acetone	606-001-00-8 200-662-2 67-64-1	10-20	Flam. Liq. 2 Eye irrit. 2 STOT SE 3	H225 H319 H336 EUH066
n-hexane	110-54-3 203-777-6 601-037-00-0 01-2119480412-44	0,25-1	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2 <u>Posebne mejne koncentracije</u> STOT RE 2	H225 H361f *** H304 H373 ** H315 H336 H411  H373; ≥ 5%

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Toluene	108-88-3 203-625-9 601-021-00-3 01-2119471310-51	0,1-0,25	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3	H225 H361d *** H304 H373 ** H315 H336
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### **SECTION 4: First Aid Measures**

#### **4.1 Description of first aid measures**

*Inhalation:*

Remove to fresh air, loosen tight clothing and, if necessary, call your doctor; the use of artificial respiration is not permitted to use mouth-to-mouth; if necessary, call your doctor. If you develop dizziness, nausea, headache, seek advice from a doctor.

*Skin contact:*

Wash with water and soap. Remove the contaminated clothing immediately.

*Eye contact:*

Rinse with clear water or solution for rinsing eyes, holding the eyelids apart for at least 15 minutes. If symptoms persist, consult a doctor.

*Ingestion:*

Rinse the mouth and drink at least 100mL. Call the doctor. Do not induce vomiting.

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

Dizziness, sleepiness, headache, vomiting, unconsciousness.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

Treatment: Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

*Suitable:*

Alcohol-resistant foam, carbon dioxide, dry chemical.

*Unsuitable:*

Water jet.

#### **5.2 Special hazards arising from the substance or mixture**

Prevent fire-fighting water from entering drains or watercourses. No hazardous combustion products are known.

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### 5.3 Advice for firefighters

In case of fire, wear a self-contained breathing apparatus. Properly protect the body (wear full protective clothing).

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing. With larger release, use respiratory protection. Eliminate sources of ignition and sparking. Ensure good ventilation.

#### **6.2 Environmental precautions**

Prevent release into the water and drains and the accumulation of vapors in closed rooms.

#### **6.3 Methods and material for containment and cleaning up**

Spilled liquid should be taken up through the absorbent (sand, soil, universal binder). Contaminated material should not be disposed of with household waste. Do not allow to enter sewer system. Throw off in an appropriate container. Packaging waste should be deferred in accordance with official regulations.

#### **6.4 Reference to other sections**

Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Avoid repeated contact with the skin, do not inhale vapor or haze. Ensure good ventilation of the places where the product is used. If you did not use the entire contents of the product, you should tightly close the container after work. Avoid contact with hot elements sparks, flame and sources of ignition. Avoid the possibility of electrostatic charge. When refilling larger quantities, ensure conductivity with the bonding and grounding of all equipment.

Do not eat, drink or smoke during work. Avoid inhaling the vapours. Close the product tightly after use. Wear protective gloves, glasses and clothing.

#### **7.2 Conditions for safe storage, including any incompatibilities**

Store in dry well-ventilated place and in tightly closed package, protected from sunlight, source of burning, heat and electrostatic charge. The floor in the warehouse need to be solvent-resistant and impermeable. Avoid frost. Do not store together with food, beverages or fodder.

#### **7.3. Specific end use(s)**

Product is intended for use in dental laboratory.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Directive 98/24/EC with all amendments

Official gazette RS, Št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18, 78/19; 72/21

Chemical name	OEL (mg/m <sup>3</sup> )	OEL (ml/m <sup>3</sup> , PPM)	Short term exposure	Note
Acetone	1210	500		K EU BAT
Toluene	192	50		K EU BAT

### BAT

Chemical name	Characteristical index  Biological sample   Time of the sampling   (BAT)
Toluene	toluene   blod   after working 10,85 mmol/mol kreatinin* -   last breath out air in the time of the exposure 0,83 mmol/l Hipuric acid   urine   after working 1,58 mol/mol kreatinin* o-krezol   urine   after working 1,58 mol/mol kreatinin*
Acetone	Acetone   blood   after working 0,34 mmol/l

### DNEL

Chemical name	Population   exposure   effects   value (unit)
Colophony	Workers   long-term inhalation   Systemic effect 117 mg/m <sup>3</sup> Workers   long-term dermal   sistemic effect 17 mg/kg/ body weight/day Users   long-term inhalation   Systemic effect 35 mg/m <sup>3</sup> Users   long-term dermal   systemic effect 10 mg/kg/body weight / day Users   long-term oral   systemic effect 10 mg/kg/body weight / day
C6-C7, isoalkanes, cyclical < 5% n-hexane	Workers   long-term inhalation   Systemic effect 5306 mg/m <sup>3</sup> Workers   long-term dermal   sistemic effect 13964 mg/kg/ body weight/day Users   long-term inhalation   Systemic effect 1131 mg/m <sup>3</sup> Users   long-term dermal   systemic effect 1377 mg/kg/body weight / day Users   long-term oral   systemic effect 1301 mg/kg/body weight / day
Acetone	Workers   long-term dermal   systemic effect 186 mg/kg/bw/d Workers   long-term inhalation   systemic effect 1210 mg/m <sup>3</sup> Workers   short-term inhalation   local effect 2420 mg/m <sup>3</sup> Users   long-term inhalation   systemic effect 200 mg/m <sup>3</sup> Users   long-term dermal   systemiceffect 62 mg/kg/bw/d Users   long term oral   systemic effect 62 mg/kg/bw/d
Toluene	Workers   Long-term inhalation   systemic effects 192 mg/m <sup>3</sup> Workers   long-term inhalation   local effects 192 mg/m <sup>3</sup> Users   short term inhalaton   systemic effects 226 mg/m <sup>3</sup> Users   short term inhalation   local effects 226 mg/m <sup>3</sup>

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Chemical name	Details of the environment   Values
Colophony	Fresh water 0,02 mg/l Sea water 0 mg/l Broken releases 0,16 mg / l Sediments in fresh water 0,007mg / kg dry weight Sediment in seawater 0.001 mg / kg dry weight Earth 0 mg / kg dry weight Wastewater Treatment Plant (STP) 1 mg / l
Acetone	Fresh water 10,6 mg/l Sea water 1,06 mg/l Sediments in fresh water 30,4 mg/l Sediment in seawater 3,04 mg/l Earth 29,5 mg/kg Wastewater Treatment Plant (STP) 100 mg/l
Toluene	Fresh water = 0.68 mg / l Seawater = 0.68 mg / l Broken releases = 0.68 mg / l Wastewater Treatment Plant (STP) = 13.61 mg / l Fresh water sediment = 16.39 mg / kg dry weight Sediment in seawater = 16.39 mg / kg dry weight Earth = 2.89 mg / kg dry weight

### 8.2 Exposure controls

Personal protective equipment in accordance with Regulation (EU) 2016/425, with the Regulation on personal protective equipment (Ur. L. RS, no. 29/05, 23/06, 17/11 - ZTZPUS-1 and 76/11) and the List harmonized standards for OVO-2018 / C 209/03.

#### ***Personal protection***

##### *Respiratory protection:*

Wear full face protection with "A" filter when used indoors for prolonged periods. If the oxygen concentration in the workplace air falls below 17%, use a self-contained open-circuit breathing apparatus.

Use respiratory mask according to SIST EN 136: 1998 / AC: 2004 Respiratory protection equipment - Gas filters and combi-filters in accordance with Official Journal EC C110 of 11 April 2014.

##### *Eye protection:*

Wear polycarbonate safety goggles at lower concentrations in the air and a full face protective mask at higher concentrations.

Whenever a risk assessment indicates it is necessary to wear safety goggles that comply with an approved standard. If contact can occur, chemical safety goggles should be worn in accordance with SIST EN 166: 2002 - Personal eye protection - Specifications and safety goggles design (TYPE 3) established in accordance with Official Journal EC C110 of 11 April 2014.

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Recommended: polycarbonate goggles with side protection; the choice should be in line with the product application and be relevant to the risk assessment.

*Hand protection:*

Longer contact: > 8 hours (time to remove obstruction): Viton® (> 0.7 mm).

Shorter contact: <1 hour (barrier removal time): Chloroprene, Nitrile rubber (0.2 mm).

Please note that the breakthrough time of any glove material varies from manufacturer to manufacturer. In the case of multi-substance mixtures, it is impossible to accurately estimate the protection time with gloves.

Wear safety gloves in accordance with SIST EN 374-1: 2003 to SIST EN

374-4: 2014, suitable for saturated hydrocarbons (petroleum), J mark- Protective gloves against chemicals and micro-organisms according to EC Official Journal C110 of 11 April 2014.

*Skin protection:*

Under normal conditions, wear cotton clothing and appropriate footwear. If the policy option is large, use clothing and footwear resistant to chemicals (PVC, rubber).

If there is a risk of ignition due to static electricity, wear antistatic protective clothing.

Wear antistatic clothing made of natural fibers (cotton) or heat-resistant synthetic fibers for protection against static discharges. For further information on materials, purpose and test methods, see the European standard SIST EN 1149-5: 2008 / Protective clothing - Electrostatic properties according to EC Official Journal C110 of 11 April 2014. Choose the type of clothing according to the product application or product. according to the risk assessment.

### 8.3 Control of environment protection

Do not spill into inland water or sewage system. Avoid entering the soil.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	easy flammable viscose liquid
<b>Colour</b>	yellow-brown colour
<b>Odour</b>	like solvent
<b>pH</b>	n.a.
<b>Boiling point</b>	> 50°C
<b>Melting point</b>	n.a.
<b>Inflammation point</b>	< 21°C
<b>Upper explosive limit</b>	1,2 vol%
<b>Lower explosive limit</b>	11,0 vol.%
<b>Decomposition temperature</b>	n.a.
<b>Vapour pressure (20°C):</b>	239 mbar (acetone)

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<b>Vapour pressure (50°C):</b>	/
<b>Density (20°C):</b>	cca 0,85 g/cm <sup>3</sup>
<b>Solubility in water:</b>	not soluble
<b>Solubility in organic solvent:</b>	soluble
<b>Partition coefficient n-octanol/water (log value)</b>	n.a.
<b>Kinematic viscosity:</b>	max. 500 mPa s
<b>Particle characteristics</b>	n.a.

### 9.2 Other information

No additional information relevant to safe use of the mixture.

### **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

Not reactive under normal temperature and proper use.

#### **10.2 Chemical stability**

Stable at normal temperature. When used in accordance with the instructions is not degraded.

#### **10.3 Possibility of hazardous reaction**

When heated, the pressure and volatile solvents are increased, risk of ignition and explosion.

#### **10.4 Conditions to avoid**

High temperature, presence of ignition sources

#### **10.5 Incompatible materials**

Strong oxidizing agents.

#### **10.6 Hazardous decomposition products**

Corrosive and irritating fumes, CO, CO<sub>2</sub>

### **SECTION 11: Toxicological information**

#### **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Due to the content of toluene and special gasoline overexposure may cause nervous system disorders, kidney damage, liver, heart and lungs.

#### **Chemical name: Acetone**

Acute toxicity-Oral: LD50 (rat): 5800 mg/kg

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Acute toxicity-Dermal: LD50 (rat): 20000mg/kg  
Acute toxicity-Inhalational: LC50 (rat,5h): 42000ppm  
Acetone has narcotic effect

**Chemical name: Hydrocarbons C6-C7**

Acute toxicity-Oral: LD50 (rat): > 2000 mg/kg  
Acute toxicity-Dermal: LD50 (rat): > 2000 mg/kg  
Acute toxicity-Inhalational: LC50 (rat,4h): 5mg/L

**Chemical name: Toluene**

Acute toxicity-Oral: LD50 (rat): 636 mg/kg  
Acute toxicity-Dermal: LD50 (rabbit): 8390 mg/kg  
Acute toxicity-Inhalational: LC50 (rat,4h): 13 mg/L

**Skin corrosion/irritation:**

Toxicological data of complete product are not available.

**Serious eye damage/irritation:**

Toxicological data of complete product are not available.

**Respiratory or skin sensitization:** Based on the available information, the classification criteria are not fulfilled.

**Germ cell mutagenicity:** Based on the available information, the classification criteria are not fulfilled. Does not contain a relevant substance that meets the classification criteria.

**Carcinogenicity:** Based on the available information, the classification criteria are not fulfilled. Does not contain a relevant substance that meets the classification criteria.

**Reproductive toxicity:** Based on the available information, the classification criteria are not fulfilled. Does not contain a relevant substance that meets the classification criteria.

**STOT-single exposure:**

Toxicological data of complete product are not available. May cause respiratory irritation.  
Calculation method

**STOT-repeated exposure:** Based on the available information, the classification criteria are not fulfilled.

**Aspiration hazard:** Based on the available information, the classification criteria are not fulfilled.

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### **SECTION 12: Ecological information**

#### **12.1 Toxicity**

Can cause long lasting harmful effects to environment.

#### **12.2 Persistence and degradability**

No data available.

#### **12.3 Bioaccumulative potential**

No data available.

#### **12.4 Mobility in soil**

Possible splitting in the environment.

#### **12.5 Results of PBT and vPvB assessment**

No data available.

#### **12.6 Endocrine disrupting properties**

No data available.

#### **12.7 Other adverse effect**

It is important that pH of material is between 6-10 when release acid or base in sewage system. Higher or lower pH can damage sewage system or purifying plant. The local Regulations should be considered.

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods**

*Methods of disposal:* Dispose in accordance with Statute about handling with waste.

*Recommendation:* Do not dispose with domestic waste. Do not allowed enter sewage system. Detergent that can be used when small amount is spilled is water.

*Waste category:* 16 03 03\* Inorganic disposal that contains hazardous substances

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<b>SECTION 14: Transport Information</b>			
	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	UN 1133		
<b>14.2 UN proper shipping name</b>	ADHESIVES containing flammable liquid		
<b>14.3 Transport hazard class(es)</b>			
Class	3		
Label(s)	/	/	/
Classification code	F1	/	/
Hazard identification	33	/	/
Tunnel restriction code	2 (D/E)	/	/
EmS	/	/	/
<b>14.4 Packing group</b>	II		
<b>14.5 Environmental hazards</b>	No data available		
<b>14.6 Special precautions for user</b>	No special precautions		
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	No data available		

### **SECTION 15: Regulatory information**

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

Product is classified in accordance with directive EC 1907/2006 and 1272/2008 and additional changes or national legislation Ur.l. RS 101/2002 and Ur.l.RS 16/2008.

#### **15.2 Chemical safety assessment**

No data available from component's supplier.

### **SECTION 16: Other information**

*Revision:*

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Version 09 issued on September 2025 in accordance with EC 1907/2006 (Commission Regulation (EU) 2015/830) and EC 1272/2008.

Revision in accordance to changes in COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### *Legend of abbreviations:*

ADR – European agreement concerning the international carriage of dangerous goods by road  
CAS – Chemical Abstracts Service  
CLP – Classification, Labeling and Packaging  
CMR – Carcinogenic, Mutagenic or toxic for Reproduction  
DNEL - Derived no-effect level  
EC<sub>50</sub>: Half maximal effective concentration  
EmS – Emergency Schedule  
GHS – Globally Harmonised System of Classification and Labeling of Chemicals  
IATA – International Air Transport Association  
IMDG – International Maritime Dangerous Goods Code  
LC<sub>50</sub>: Lethal concentration, 50%  
LD<sub>50</sub>: Median lethal dose; the dose causing 50% lethality  
MARPOL – International convention for the prevention of pollution from ships  
NOEC - No-observed-effect concentration  
OEL - Occupational exposure limit  
OECD - Organisation for Economic Co-operation and Development  
PBT – Persistent Bioaccumulative Toxic  
PNEC: Predicted no-effect concentration  
Ppm – parts per million  
REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals  
RID – Regulation concerning the international carriage of dangerous goods by rail  
vPvB – very Persistent and very Bioaccumulative

### *References:*

Safety data sheets of the substances for the product  
Directive EC 1907/2006 and 1272/2008 with all amendments and implementations  
Council Directive 98/24/EC with all implementations and amendments  
Official Gazette RS, No. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18, 78/19; 72/21;  
Directive 2008/98/EC with all amendments, Official Gazette RS 37/15, 69/15.  
Martindale: The Extra Pharmacopoeia, 13. edition  
European convention about international transport of hazardous material ADR  
Dangerous Goods Regulations (DGR) for the air transport (IATA)  
International Maritime Dangerous Goods Code IMDG

### *Disclaimer of expressed and implied warranties:*

The information contained in the safety data sheet refer to the manufacturer's current knowledge and are a guideline for the safe use, handling, disposal, storage and

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transportation, but could not be used as a guarantee. The information relates only to the specific product and is not suitable for combining with other materials or for use in another process as described in the instructions.