

Printing date 06.10.2022 Version number 1 Revision: 06.10.2022

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

- · Product identifier
- · Trade name: UltradentTM Universal Dentin Sealant
- · Article number: SDS 142-001.08, 10344
- · Relevant identified uses of the substance or mixture and uses advised against Professional Dentin Sealant
- · Application of the substance / the mixture Professional Dentin Sealant
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Ultradent Products Inc.

505 W. Ultradent Drive (10200 S) South Jordan, UT 84095-3942

USA

onlineordersupport@ultradent.com

EC Responsible Person Ultradent Products GmbH Am Westhover Berg 30 51149 Cologne Germany

Email: infoDE@ultradent.com

Emergency Phone: +49(0)2203-35-92-0

- · Further information obtainable from: Customer Service
- · Emergency telephone number:

CHEMTREC (NORTH AMERICA) : (800) 424-9300 (INTERNATIONAL) : +(703) 527-3887

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms GHS02
- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

[or shower].

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

3 Composition/information on ingredients

· Mixtures

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

· Dangerous components:

CAS: 64-17-5 Ethyl Alcohol

EINECS: 200-578-6

∂l Alcohol 🌎 Flam. Liq. 2, H225

am. Liq. 2, H225 >60-<80%

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

4 First aid measures

- · Description of first aid measures
- General information:

Show this safety data sheet to the doctor in attendance. When symptoms persist or in all cases of doubt seek medical advice.

Immediately remove any clothing soiled by the product.

· After inhalation:

Immediate medical attention is required. Move to fresh air. If not breathing, give artificial respiration. Consult a physician.

· After skin contact:

Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Use a mild soap if available. Call a physician if irritation develops or persists.

Immediately rinse with water.

· After eye contact:

Remove contact lenses, if present. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation develops or persists.

· After swallowing:

Rinse mouth with water and afterwards drink plenty of water or milk. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention immediately.

· Most important symptoms and effects, both acute and delayed

See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

• Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use water spray, fog, carbon dioxide (CO₂), foam or dry chemical.
- · Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions. Flash back possible over considerable distance. Hazardous Combustion Products: No information available.

Explosion Data:

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

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- · Advice for firefighters:
- · Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological information.

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Methods for Containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Pick up and transfer to properly labeled containers

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 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

· Precautions for safe handling:

Advice on safe handling: Keep containers tightly closed in a dry, cool and well-ventilated place. Hygiene measures: When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

· Information about fire - and explosion protection:

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:

Storage Conditions: Keep locked up or in an area accessible only to qualified or authorized persons. Store between 41 and 77 $^{\circ}F$ (5 - 25 $^{\circ}$ C) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in original container.

Store in a cool location.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

See product labelling.

Keep container tightly sealed.

Store in cool, dry conditions in well - sealed receptacles.

· Specific end use(s) Professional Dentin Sealant

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8 Exposure controls/personal protection

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace:

64-17-5 Ethyl Alcohol

WEL Long-term value: 1920 mg/m³, 1000 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Engineering Measures: Ensure adequate ventilation, especially in confined areas.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Respiratory protection:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

· Hand protection



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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

chemical mixture.

The selection of 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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eve/face protection

Safety glasses with side shields.



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information

· Physical state Fluid

· Colour: Yellow-brown · Odour: Pleasant

· *Odour threshold:* Not determined.

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Melting point/freezing point:	-114 °C
Boiling point or initial boiling point and boiling ran	ge 78 °C
Flammability	Highly flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	11 °C
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	59.6 hPa
Density and/or relative density	
Density at 20 °C:	$0.916\text{-}1.02 \text{ g/cm}^3$
Relative density	Not determined.
Vapour density at 20 °C	1.59 g/cm^3
	0
Other information	
Appearance:	Limid
Form: Important information on protection of health a	Liquid nd
environment, and on safety.	nu
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation
Explosive properties.	explosive air/vapour mixtures are possible.
Change in condition	exprosive an vapour mixtures are possible.
Evaporation rate	Not determined.
•	noi ueiermineu.
Information with regard to physical hazard classes	77.11
Explosives	Void
Flammable gases	Void
Aerosols	Void
Ovidicina gasas	
	Void
Gases under pressure	Void
Gases under pressure	
Gases under pressure Flammable liquids Flammable solids	Void Highly flammable liquid and vapour. Void
Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures	Void Highly flammable liquid and vapour. Void Void
Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids	Void Highly flammable liquid and vapour. Void
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Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures and contact with water	Void Highly flammable liquid and vapour. Void Void Void Void Void Void Void Void
Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures, which emit flammable gas in contact with water Oxidising liquids Oxidising solids	Void Highly flammable liquid and vapour. Void Void Void Void Void Void Void Void
Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable gas in contact with water Oxidising liquids Oxidising solids	Void Highly flammable liquid and vapour. Void Void Void Void Void Void Void Void
Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures of contact with water Oxidising liquids	Void Highly flammable liquid and vapour. Void Void Void Void Void Void Void Void

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10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: Stable under recommended storage conditions
- · **Possibility of hazardous reactions:** No dangerous reactions known.
- · Conditions to avoid: Contact with acetyl chloride and a wide range of oxidizers.
- · Incompatible materials: Strong oxidizing agents

· Hazardous decomposition products: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

11 Toxicological information

- · Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

LD/LC30 values relevant for classification:			
64-17-5 Ethyl Alcohol			
Oral	LD50	5,600 mg/kg (Guinea pig)	
		3,400 mg/kg (mouse)	
		7,060 mg/kg (rat)	
	LC50 Fish	>10,000 mg/l (Fish)	
Inhalative	LC50/4 h	39 mg/l (mouse)	
		20,000 mg/l (rat)	

Skin corrosion/irritation

Product Information

• May cause irritation and defatting of skin on prolonged contact.

Component Information

- No information available
- · Serious eye damage/irritation

Product Information

• Liquid or vapor may cause irritation.

Component Information

- No information available
- · Respiratory or skin sensitisation

Product Information

- Exposure to over 1000 ppm may cause headache, drowsiness, vomiting, coughing, dizziness or stupor.
- Component Information
 No information available
- Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

64-17-5 Ethyl Alcohol

Algae Toxicity 1,000 mg/l (Algae)

· Persistence and degradability No information available

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· Bioaccumulative potential

Discharge into the environment must be avoided Chemical Name log Pow Ethanol -0.32 64-17-5

- · Mobility in soil No information available
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · Other adverse effects Discharge into the environment must be avoided
- · 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.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Dispose of contents/container in accordance with international, federal, state, and local regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information · UN number or ID number · ADR, IMDG, IATA UN1866

· UN proper shipping name

· ADR 1866 RESIN SOLUTION
· IMDG, IATA RESIN SOLUTION

- · Transport hazard class(es)
- · ADR, IMDG, IATA



· Class 3 Flammable liquids.

· Label

· Packing group

· ADR, IMDG, IATA

• Environmental hazards: Not applicable.

· Special precautions for user Warning: Flammable liquids.

· Hazard identification number (Kemler code): 33

· EMS Number: F-E,S-E

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Stowage Category	В
Maritime transport in bulk according	ng to IMO
instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, II

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · Chemical safety assessment:

Device is biocompatible when used as directed by dental professionals per ISO 10993-1

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 from Section 3

H225 Highly flammable liquid and vapour.

- · Department issuing SDS: Environmental, Health, and Safety
- · Contact: Customer Service
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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Safety data sheet according to 1907/2006/EC, Article 31

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Flam. Liq. 2: Flammable liquids – Category 2

* Data compared to the previous version altered.

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