

# EU Safety Data Sheet

BioUniversal E



Date of issue / Reference

22.09.2005 hot

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Company

Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan  
Principality of Liechtenstein

## 1 Commercial product name and supplier

1.1 Commercial product name /  
Designation

**BioUniversal E**

1.2 Application / Use

Universal alloy

1.3 Producer

Ivoclar Vivadent, Inc.  
175 Pineview Drive, Amherst NY 14228, USA

1.4 Supplier

1.5 TOX emergency number

Emergency-Call USA: (716) 691-0010  
Emergency-Call LI: +423 / 235 35 35 or 373 40 40

## 2 Composition

2.1 Chemical characterization

Dental alloy made of:  
Ag 52.2 % (7440-22-4), Pd 40.0 % (7440-05-3), In 1.4 % (7440-74-6), Sn 5.5 % (7440-31-5), < 1.0 % Re, Ru, Zn

2.2 Hazardous components

2.3 Further information

None.

## 3 Hazards identification

Avoid breathing of grinding dust and vapours.  
Melted material may cause burns.

## 4 First aid measures

4.1 Eye contact

Flush eyes with plenty of water (10-15 min.). Call a physician if irritation persists.

4.2 Skin contact

Melted material presents a special hazard of deep thermal burns. If burn occurs, treat as any thermal burn.

4.3 Ingestion

Call a physician immediately.

4.4 Inhalation

Remove to fresh air.

4.5 Further information

None.

## 5 Fire-fighting measures

5.1 Suitable extinguishing media

Not required, not flammable.

5.2 Extinguishing media to avoid

Do not use direct water stream.

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5.3 Further information None.

**6 Accidental release measures**  
Clean up mechanically.  
Clean and reuse

## 7 Handling and storage

7.1 Handling Only adequately trained personnel should handle this product. Keep out of reach of children.

7.2 Industrial hygiene Usual hygienic measures for dental practice.

7.3 Storage No specific requirements.

7.4 Place of storage

7.5 Fire- and explosion-protection No specific requirements.

## 8 Exposure controls / Personal protection

8.1 Technical measures Provide adequate local ventilation. Control airborne concentration below the exposure guideline.

8.2 Control of threshold limits Dust and vapors: MAK 0.1 mg/m<sup>3</sup>

8.3 Personal protective equipment

8.3.1 Respiratory protection In dusty atmospheres, use an approved dust respirator P2. If metal fumes are present, use an approved high-efficiency particulate respirator (P3).

8.3.2 Hand protection Gloves.

8.3.3 Eye protection Safety goggles.

8.3.4 Other Use only with adequate ventilation.

## 9 Physical and chemical properties

9.1 Appearance solid

9.2 Colour white

9.3 Odour odourless

9.4 Change of physical state

Melting range 1100-1150 °C

Casting temperature 1200-1260 °C

9.5 Density 10.7 g/cm<sup>3</sup>

9.6 Vapour pressure not applicable

9.7 Viscosity not applicable

Test method:

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## 9.8 Solubility

Solubility in

non soluble

## 9.9 pH

not applicable

## 9.10 Flash point

not applicable

## 9.11 Ignition temperature

not applicable

## 9.12 Explosion limits

Lower:

Upper:

not applicable

## 9.13 Further information

Complies with ISO 8891, ISO 9693

## 10 Stability and reactivity

### 10.1 Thermal decomposition

None, if used in accordance to instructions.

### 10.2 Hazardous decomposition products

None, if used in accordance to instructions.

### 10.3 Hazardous reactions

None, if used in accordance to instructions.

### 10.4 Further information

None.

## 11 Toxicological information

### 11.1 Acute toxicity

Alloy: non-cytotoxic, non-mutagenic, non-irritant, non-sensitizer

### 11.2 Subacute / Chronic toxicity

Fumes or dusts generated from cutting or grinding operations may cause respiratory irritation.

### 11.3 Further information

None.

## 12 Ecological information

No ecological problems to be anticipated if properly handled and used.

nearly insoluble

## 13 Disposal considerations

Recycling

### 13.1 EU waste key

17 04 07

## 14 Transport information

### 14.1 Transport at land

ADR

RID

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		UN Number	Kemler Number
		Packing Group	
		Proper shipping name	
14.2	Transport at sea	ADNR	IMDG
		UN Number	
		EMS	MFAG
		Packing Group	
		Proper shipping name	
14.3	Air transport	ICAO / IATA-DGR	
		UN Number	
		Proper shipping name	
		Subsidiary Risk	
		Labels	
	Passenger airplane	Packing Group	
		Packing Instructions	
	Cargo Airplane	max.	
		Packing Instructions	
		max.	
14.4	Further information	Product is not classified for any mode of transportation.	

## 15 Regulatory information

The product is a medical device according to the EC-directive 93/42.

15.1 UN number

15.2 National regulations

15.3 EU number

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15.4 Hazard symbols

15.5 Hazard designation

15.6 Risk phrases

15.7 Safety phrases

15.8 MAK value

0.1 ml/m<sup>3</sup> (ppm)

15.9 BVD classification (CH)

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15.10 VbF (D)

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15.11 Further information

None.

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## 16 Other information

Version: 1

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*The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on properties.*

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This safety data sheet has been generated with the safety database 'ChemManager',  
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91/155/EEC
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