

EU Safety Data Sheet

4all



Date of issue / Reference

09.05.2005 hot

Replaces version of

10.07.2002

Date of printing

09.05.2005 **Sheet No. 1483**

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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

4all

1.2 Application / Use

Ceramic alloy

1.3 Producer

Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Fürstentum Liechtenstein

1.4 Supplier

1.5 TOX emergency number

Emergency-Call: +423 / 235 35 35 or 373 40 40
Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein

2 Composition

2.1 Chemical characterization

Dental alloy made of:
Ni 61.4 % (CAS-Nr. 7440-02-0), Cr 25.7 % (7440-47-3), Mo 11.0 %
(7439-98-7), Si 1.5 % (7440-21-3), < 1.0 % Mn, Al, C

2.2 Hazardous components

2.3 Further information

None.

3 Hazards identification

May cause sensitization by inhalation and skin contact. 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. 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 combustible
Not required.

5.2 Extinguishing media to avoid

None.

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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

Not required.

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 0.5 mg/m³

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

Test method:

Melting range

1260-1350 °C

Casting temperature

1405-1465 °C

9.5 Density

8.4 g/cm³ (20°C)

9.6 Vapour pressure

not applicable

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9.7 Viscosity

not applicable

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

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

Skin sensitisation may develop from prolonged, repeated skin contact.

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

Nickel: Inhalation of grinding dust and vapours can cause cancer.

12 Ecological information

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

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13 Disposal considerations

Recycling

13.1 EU waste key

17 04 07

14 Transport information

14.1 Transport at land

ADR

RID

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

Packing Group

Passenger airplane

Packing Instructions

max.

Cargo Airplane

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.

This product does not require classification according to the criteria of the EC.

15.1 UN number

15.2 National regulations

15.3 EU number

15.4 Hazard symbols

15.5 Hazard designation

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15.6 Risk phrases

15.7 Safety phrases

15.8 MAK value

0.5 mg/m³ ml/m³ (ppm)

15.9 BVD classification (CH)

15.10 VbF (D)

15.11 Further information

None.

16 Other information

Version: 2

Changes: 13.1

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.

This safety data sheet has been generated with the safety database 'ChemManager',
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