High Gold Palladium Free Solder

(HGPF) 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 / High Gold Palladium Free Solder (HGPF)

Designation

1.2 Application / Use Pre solder

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 Solder made of :

51.5 % Au (CAS-Nr. 7440-57-5), 46.0 % Ag (7440-22-4), 1.0 %

Mn (7439-96-7), < 1.0 % Pt, In, Ir, Li, 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. 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 combustible

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/m³

8.3 Personal protective equipment

8.3.1 Respiratory protection If metal fumes are present, use an approved high-efficiency

particulate respirator (P3).

In dusty atmospheres, use an approved dust respirator P2.

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 yellow

9.3 Odour odourless

9.4 Change of physical state Test method:

Melting range 975-1010 °C

9.5 Density

9.6 Vapour pressure

not applicable

9.7 Viscosity

not applicable

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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 None.

10 Stability and reactivity

10.1 Thermal decomposition None, if used in accordance to instructions.

0.2 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 Solder: 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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15.11 Further information

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UN Number Kemler Number Packing Group Proper shipping name Transport at sea **ADNR IMDG** UN Number **EMS MFAG** Packing Group Proper shipping name ICAO / IATA-DGR 14.3 Air transport **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** This product does not require classification according to the criteria of the EC. 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 15.4 Hazard symbols 15.5 Hazard designation 15.6 Risk phrases 15.7 Safety phrases 15.8 MAK value $0.1 \text{ mg/m}^3 \text{ ml/m}^3 \text{ (ppm)}$ 15.9 BVD classification (CH) 15.10 VbF (D)

None.

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16 Other information Version: 3

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.

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91/155/EEC