

# Material Safety Data Sheet

High Gold Palladium Free Solder (HGPF)



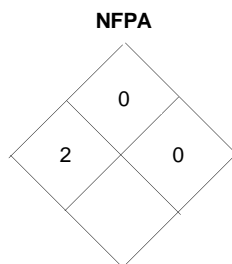
Date of issue / Reference 27.09.2007 lise / Version 4  
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Company Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan  
Principality of Liechtenstein

## 1 Commercial product name and supplier

1.1 Commercial product name / Designation **High Gold Palladium Free Solder (HGPF)**



HMIS	
H	2
F	0
R	0
C	

1.2 Application / Use Pre solder

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

1.4 Supplier Ivoclar Vivadent, Inc.  
175 Pineview Drive, Amherst NY 14228, USA  
2785 Skymark Ave., Unit 1 Mississauga, ON L4W4Y3, Canada  
MSDS prepared by Andejeet Gulati. Tel. No. 716 691-0010

1.5 24 Hour Emergency Assistance Emergency-Call USA- Infotrac: 1-800-535-5053  
Emergency-Call Canada - Canutec: 1-613-996-6666

General MSDS Assistance US: 1-800-533-6825  
Canada: 1-800-263-8182

## 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

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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.

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## 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.
- 5.3 Flash point Test method:  
not applicable
- 5.4 Ignition temperature not applicable
- 5.5 Explosion limits Lower:  
Upper:  
not applicable
- 5.6 Further information None.

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## 6 Accidental release measures

Clean up mechanically.  
Clean and reuse

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## 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.

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## 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 If metal fumes are present, use an approved high-efficiency particulate respirator (P3).

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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.

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## 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

9.5 Density

9.6 Vapour pressure

not applicable

9.7 Viscosity

not applicable

9.8 Solubility

Solubility in water

non soluble

9.9 pH

not applicable

9.10 Further information

None.

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## 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.

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## 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.

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## 12 Ecological information

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

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## 13 Disposal considerations

Recycling

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## 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 as a dangerous good for transport.

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## 15 Regulatory information

This product does not require classification as Dangerous Goods. The product is a medical device according to the EC-directive 93/42/EEC.  
This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and

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Drug Administration and Health Canada.

15.1 National regulations

15.2 NFPA Storage

15.3 Further information None.

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**16 Other information** Version: 4  
Changes: 1.5

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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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