1 Commercial product name and supplier

1.1 Commercial product name / Designation
Golden Ceramic Solder (GCS)

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:
54.0 % Au (CAS-Nr. 7440-57-5), 3.9 % Pd (7440-05-3), 40 % Ag (7440-22-4), 1.0 % Mn (7439-96-7), 1.0 % Zn (7440-66-6), < 1.0 % B, Re

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.
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
995-1045 °C

9.5 Density

9.6 Vapour pressure
not applicable

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: not applicable
Upper: not applicable

9.13 Further information None.

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 Solder: non-cytotoxic, non-mutagenic, non-irritant, non-sensitizer
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
### 14.2 Transport at sea

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### 14.4 Further information

Product is not classified for any mode of transportation.

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### 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
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#### 15.2 National regulations

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#### 15.3 EU number
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#### 15.4 Hazard symbols

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#### 15.5 Hazard designation

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#### 15.6 Risk phrases

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#### 15.7 Safety phrases

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#### 15.8 MAK value

0.1 mg/m³ ml/m³ (ppm)

#### 15.9 BVD classification (CH)
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#### 15.10 VbF (D)
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#### 15.11 Further information

None.
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.