

**1. IDENTIFICATION OF SUBSTANCES / PREPARATION AND COMPANY**

Product Name: Fidelity G40  
Product Code: 899, 901

Application: Dental casting alloy

Manufacturer: Leach & Dillon Dental Alloys  
Address: F5855 Oberlin Drive, San Diego CA 82121-4718, USA  
Emergency Tel No. Chemtrec: 1-703-741-6090 (collect calls accepted – German and English)  
Fax: 1-858-626-8686

Email address of competent person responsible for the SDS: [info@argen.com](mailto:info@argen.com)

Distributor: Davis Schottlander & Davis Ltd  
Fifth Avenue, Letchworth Garden City,  
Herts SG6 2WD UK  
Tel: +44 (0)1462 480848 Fax: +44 (0)1462 482802  
[msds@schottlander.co.uk](mailto:msds@schottlander.co.uk) [www.schottlander.com](http://www.schottlander.com)

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**2. HAZARD IDENTIFICATION****2.1. Classification of the substance or mixture**

Classification information

This product does not meet the classification criteria in (EC) N° 1272/2008 (CLP)

This product does not meet the labelling criteria stated in 67/548/EWG and 1999/45/EC

**2.2. Label elements**

Labelling is in accordance with (EC) No 1272/2008 (CLP Regulation). Label elements in the solid form which the product is marketed

**2.3. Other hazards**

**EYES** Contact with eyes may cause severe irritation and possible eye burns.

**SKIN:** May cause severe irritation and possible burns.

**INGESTION:** May cause gastrointestinal irritation with nausea, vomiting, and diarrhoea.

**INHALATION:** May cause irritation and burns to the respiratory tract.

**SILVER:** Absorption of silver compounds by ingestion, inhalation or through broken skin can cause argyria, a permanent bluish-grey discoloration of the skin, conjunctiva and mucous membranes. Generalized argyria develops after 2 to 25 years of exposure. There are no systematic effects or symptoms and no physical disability. Silver is considered an experimental equivocal tumorigenic agent by RTECS criteria.

**INDIUM:** May cause foetal effects based upon animal studies. May cause lung damage and blood abnormalities. Target Organs: Blood, kidneys, liver, lungs.

PBT assessment: No data available

vPvB assessment: No data available

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances

This product is not a substance. This is not applicable.

#### 3.2 Mixtures

Ingredients:

Metal	%	Symbol	CAS No.	EC/EG No.	ACGIH 8HR TLV	OSHA 8HR PEL
Gold	39.9	Au	7440-57-5	231-165-9	Not established	Not established
Palladium	4	Pd	7440-05-3	231-115-6	No data	No data
Silver	45.99	Ag	7440-22-4	231-131-3	0.01 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Iridium	<1	Ir	7439-88-5	231-095-9	No data	No data
Indium	1.5	In	7440-74-6	231-180-0	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup> TWA
Copper	7.59	Cu	7440-50-8	231-159-6	0.1 mg.m <sup>3</sup> (fume) 1 mg.m <sup>3</sup> (Dust)	0.2 mg/m <sup>3</sup> (Fume) 1mg/m <sup>3</sup> (Dust)
Zinc	1	Zn	7440-66-6	231-175-3	5 mg/m <sup>3</sup>	No data
Lithium	<1	Li	7439-93-2	231-102-5	No data	No data

NOTE: % values are in weight percent and reflect nominal composition.

### 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

**EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.

**SKIN CONTACT:** Scrub skin thoroughly with soap and water.

If victim is conscious and alert, give 2-4 cupfuls of milk or water

**INGESTION:** If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Induce vomiting. \*\*Never give anything by mouth to an unconscious person.  
Get medical aid.

**INHALATION:** Remove affected person to fresh air and assist with additional oxygen if necessary. Get first aid if other symptoms appear.

#### 4.2. Most important symptoms and effects, both acute and delayed

No data available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No data available.

### 5. FIRE FIGHTING MEASURES

#### 5.1. Extinguishing media

Metal fire powders, sand.

#### 5.2. Special hazards arising from the substance or mixture

Heating Beyond the melting range may generate fumes which are not flammable.

- 5.3. Advice for fire-fighters**  
Wear protective clothing and use a self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures**  
For non-emergency personnel  
Use proper personal protective equipment as described in section 8.  
For emergency responders  
Use proper personal protective equipment as described in section 8.
- 6.2. Environmental precautions**  
Collect contaminated materials in separate containers. Discharge according to local regulations.
- 6.3. Methods and material for containment and cleaning up**  
Avoid creating dust and pick-up using mechanical means
- 6.4. Reference to other sections**  
No data available

## 7. HANDLING AND STORAGE

- 7.1. Precautions for safe handling**  
Ensure the workspace has proper ventilation  
Do not consume substances during work.  
General protective and hygiene measures  
Wash hands before and after breaks. Remove contaminated clothing immediately. Do not ingest or allow to come into contact with the eyes.
- 7.2. Conditions for safe storage, including any incompatibilities**  
Keep container closed in a ventilated area
- 7.3. Specific end use(s)**  
No data available

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Control parameters**  
Occupational exposure limit values
- 8.2. Exposure controls**
- |                 |   |
|-----------------|---|
| RESPIRATORY:    | Provide general ventilation and local exhaust to keep levels below the TLV stated in SECTION 3. Wear a NIOSH approved respirator for dust exceeding the TLVs.<br>Latex gloves are recommended while grinding, heat resistant gloves should be worn while casting and handling hot metals or moulds. |
| EYE PROTECTION: | Wear eye protection suitable to each individual operation.  |
| OTHER:          | Wear apron, lab coat or other protective clothing.  |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Information on basic physical and chemical properties**
- |                |                |
|----------------|----------------|
| Appearance:    | RICH YELLOW    |
| Odour:         | Not Applicable |
| pH:            | Not Applicable |
| Boiling Point: | Not Applicable |

Melting Range: 860-925 °C  
Flash Point: Not Applicable  
Flammability: Not Applicable  
Autoflammability: Not Applicable  
Explosive Properties: Not Applicable  
Oxidizing Properties: Not Applicable  
Vapor Pressure: Not Applicable  
Solubility (Water/Fat): Insoluble

## 9.2. Other information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

At ordinary and high (below the melting range) temperatures, the material oxidizes but is stable. At very high temperatures the alloy produces fumes.

### 10.2. Chemical stability

Product is stable under normal storage and handling conditions. See Section 7.

### 10.3. Possibility of hazardous reactions

Hydrogen gas can possibly form if the product comes into contact with acid

### 10.4. Conditions to avoid

N/A if the product is handled according to the Instructions for Use

### 10.5. Incompatible materials

Acid

### 10.6. Hazardous decomposition products

None are known

## 11. TOXICOLOGY INFORMATION

### 11.1. Information on toxicological effects

No data is available other than the information provided in Sections 2 and 3

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

No data available

### 12.2. Persistence and degradability

No data available

### 12.3. Bio-accumulative potential

No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Other adverse effects

No data available

**13. DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods****Product:**

Always recover all waste material and send to Department A at The Argen Corporation for refining.

**Packaging:**

Empty container completely and dispose according to local regulations.

**14. TRANSPORT INFORMATION****14.1. Transport ADR/RID/AND**

This product is not subject to ADR/RID/AND regulations

**14.2. Transport IMDG**

This product is not subject to IMDG regulations

**14.3. Transport ICAO-TI / IATA**

This product is not subject to ICAO-Ti / IATA regulations

**14.4. Other information**

No data available

**14.5. Environmental hazards**

No data is available other than the information provided in Sections 2 and 3

This product is not subject to ICAO-Ti / IATA regulations

**14.6. Special precautions for user**

None

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable

**15. REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Germany:

Wassergefährdungsklasse WGK (VwVwS): WGK-1 (self-assessed)

**15.2. Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**16. FURTHER INFORMATION****16.1. Training advice**

In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this SDS.

**16.2. Disclaimer**

The information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof. However, Leach & Dillon Dental Alloys makes no representations as to the completeness of accuracy thereof and information is supplied upon the condition that the persons receiving the above material will make their own determination as to its suitability for their purposes prior to

## SAFETY DATA SHEET

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