

1. IDENTIFICATION OF SUBSTANCES / PREPARATION AND COMPANY

Product Name: Matchmate 616
Product Code: 037, 923

Application: Dental casting alloy for the manufacturing of a fixed or removable dental prosthesis in a dental laboratory

Manufacturer: Leach & Dillon Dental Alloys
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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 diarrhea.

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

BORON: Boron is a cumulative weak poison. Causes depression of the circulation, persistent vomiting, diarrhoea, followed by profound shock and coma. Temperature is subnormal and a scarlatina-form rash may appear when much is ingested (SAX)

GALLIUM: May cause bone marrow depression.

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

RUTHENIUM: The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed.

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 8 HR TLV	OSHA 8 HR PEL
PALLADIUM	80.2	Pd	7440-05-3	231-115-6	No data	No data
RUTHENIUM	<1	Ru	7440-18-8	231-127-1	No data	No data
INDIUM	5.4	In	7440-74-6	231-180-0	0.1 mg/m ³	0.1 mg/m ³ TWA
GALLIUM	6.8	Ga	7440-55-3	231-163-8	No data	No data
COPPER	4.9	Cu	7440-50-8	231-159-6	0.1 mg/m ³ (Fume) 1 mg/m ³ (Dust)	0.2 mg/m ³ (Fume) 1 mg/m ³ (Dust)
ZINC	<1	Zn	7440-66-6	231-175-3	5mg/m ³	No data
BORON	<1	B	7440-42-8	231-151-2	Not established	Not established
TIN	2	Sn	7440-31-5	231-141-8	2 mg/m ³	2 mg/m ³

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.

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:	WHITE
Odour:	Not Applicable
pH:	Not Applicable
Boiling Point:	Not Applicable
Melting Range:	1190-1210 °C
Flash Point:	Not Applicable
Flammability:	Not Applicable
Auto flammability:	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 Leach & Dillon Dental Alloys 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 use. In no event will Leach & Dillon Dental Alloys be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.