1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: Degudent H
REACH Registration No.: if available listed in Chapter 3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant applications identified: For dental use only.

1.3. Details of the supplier of the safety data sheet

Company: DeguDent GmbH
Postfach 1364
D-63403 Hanau

Telephone: +49 (0)6181/59-5767
Telefax: +49 (0)6181/59-5879
Email address: SDB.Degudent-DE@dentsply.com

1.4. Emergency telephone number

Emergency information: +49 (0)180 / 23 24-555 (international)

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not a hazardous mixture according to Regulation (EC) No 1272/2008.

Classification as per Directive 67/548/EC or Directive 1999/45/EC
In accordance with Directive 1999/45/EC, the product does not need to be classified nor labelled.

2.2. Label elements

Labelling as per (EU) 1272/2008
Statutory basis: Labelling not required according to EU-CLP Ordinance (1272/2008).

2.3. Other hazards

In case of melting, soldering or grinding:
Dusts and vapors: Do not inhale.
A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

3. Composition/information on ingredients

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

- **Gold** 84.4%
  - CAS-No.: 7440-57-5
  - EC-No.: 231-165-9

- **Platinum** 8.0%
  - CAS-No.: 7440-06-4
  - EC-No.: 231-116-1

- **Palladium** 5.0%
Information on ingredients / Hazardous components as per Directive 67/548/EC or Directive 1999/45/EC

- **Gold** 84.4%
  - CAS-No. 7440-57-5  EC-No. 231-165-9
- **platinum** 8.0%
  - CAS-No. 7440-06-4  EC-No. 231-116-1
- **Palladium** 5.0%
  - CAS-No. 7440-05-3  EC-No. 231-115-6
- **Indium** 2.5%
  - CAS-No. 7440-74-6  EC-No. 231-180-0
- **Tantal** 0.1%
  - CAS-No. 7440-25-7  EC-No. 231-135-5

Texts of H phrases, see in Chapter 16
See chapter 16 for text of risk phrases

4. First aid measures

4.1. Description of first aid measures

- **Inhalation**
  - Dusts and vapours: Remove to fresh air.

- **Eye contact**
  - Dusts and vapours: Rinse thoroughly with plenty of water keeping eyelid open.
  - If eye irritation persists, consult a specialist.

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

- **Symptoms**
  - No information available.

- **Hazards**
  - None known

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

- If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed

5. Fire-fighting measures

5.1. Extinguishing media

- **Suitable extinguishing media:**
  - special powder against metal fire
  - quenching powder
  - dry sand
  - common salt

- **Unsuitable extinguishing media:**
  - Water
  - carbon dioxide (CO2)
5.2. Special hazards arising from the substance or mixture
None known.

5.3. Advice for firefighters
Extinction measures are to be adjusted to the specific location.
The product itself does not burn.
Employ protective equipment commonly used in the event of fire.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
No special measures are required.

6.2. Environmental precautions
No special environmental precautions required.

6.3. Methods and material for containment and cleaning up
Use mechanical handling equipment.

6.4. Reference to other sections
Wear personal protective equipment; see section 8.
Disposal considerations; see section 13.

7. Handling and storage
7.1. Precautions for safe handling
In case of melting, soldering or grinding:
Dusts and vapors: Do not inhale.
Local ventilation.
No special measures are necessary if properly handled.
In case of dust or vapor: Wear personal safety equipment

7.2. Conditions for safe storage, including any incompatibilities
Storage
No special storage conditions required.

German storage class
13 - Non Combustible Solids

7.3. Specific end use(s)
We are unaware of any specific end uses which go beyond the data reported in Section 1.

8. Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>EC-No.</th>
<th>Type of exposure</th>
<th>Standard Limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platinum</td>
<td>7440-06-4</td>
<td>1 mg/m³</td>
<td>231-116-1</td>
<td>Time Weighted Average (TWA):(EU ELV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indium</td>
<td>7440-74-6</td>
<td>4 mg/m³</td>
<td>231-180-0</td>
<td>Time Weighted Average (TWA):(EU40 (UK))</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7440-06-4</td>
<td>10 mg/m³</td>
<td>Time Weighted Average (TWA):(EU40 (UK))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7440-74-6</td>
<td>0.1 mg/m³</td>
<td>Time Weighted Average (TWA):(EU40 WEL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7440-06-4</td>
<td>0 ppm</td>
<td>Short Term Exposure Limit (STEL):(EU40 WEL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7440-74-6</td>
<td>0.3 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Engineering measures
In case of melting, soldering or grinding:
Adequate exhaustion / ventilation of the work site or machinery must be assured. Vacuuming of objects.

Personal protective equipment

Respiratory protection
If workplace exposure limit is exceeded apply Dust mask with P2 particle filter.

Hand protection
No special protective equipment required.

Eye protection
Safety glasses with side-shields

Skin and body protection
No particular measures required.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practices.
Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work.
Do not inhale smoke, dust, vapor.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
Form solid
Colour light yellow
Odour odourless

Melting point/range 1100 - 1210 °C
Density 18.1 g/cm3
Autoinflammability Not capable of spontaneous combustion or heating.

9.2. Other information

Other information No further physicochemical data were determined.

10. Stability and reactivity

10.1. Reactivity
no data available

10.2. Chemical stability
The product is chemically stable.

10.3. Possibility of hazardous reactions
10.4. **Conditions to avoid**

No limitations

10.5. **Incompatible materials**

None known

10.6. **Hazardous decomposition products**

Decomposition products occurring when heated above melting temperature
metallic vapors

11. **Toxicological information**

11.1. **Information on toxicological effects**

- **Acute oral toxicity**: No data available
- **Acute inhalation toxicity**: No data available
- **Acute dermal toxicity**: No data available
- **Skin irritation**: No data available
- **Eye irritation**: No data available
- **Sensitization**: No data available
- **Repeated dose toxicity**: No data available
- **Mutagenicity assessment**: No data available
- **Carcinogenicity**: No data available
- **Toxicity to reproduction**: No data available
- **Further information**: No hazardous reactions are known if properly handled and stored.

12. **Ecological information**

12.1. **Toxicity**

*No ecotoxicological data is available for this product.*

12.2. **Persistence and degradability**

- **Biodegradability**: No data available

12.3. **Bioaccumulative potential**

- **Bioaccumulation**: No data available

12.4. **Mobility in soil**

- **Mobility**: The product is insoluble in water.
  - No further information available

12.5. **Results of PBT and vPvB assessment**
A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6. Other adverse effects
Further Information
Dusts and water-soluble forms of the alloy:
Introduction into soil, natural water bodies or sewerage must be prevented.

13. Disposal considerations
13.1. Waste treatment methods

Product
Can be used after re-conditioning.

14. Transport information
Not dangerous according to transport regulations.

14.1. UN number: --
14.2. UN proper shipping name: --
14.3. Transport hazard class(es): --
14.4. Packing group: --
14.5. Environmental hazards: --
14.6 Special precautions for user: No

15. Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
National legislation

15.2. Chemical safety assessment
Chemical safety assessment: No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH Regulation is required for this product.

16. Other information
Risk phrase (R phrase) texts

Texts of the H-phrases

Further information
Changes since the last version are highlighted in the margin. This version replaces all previous versions. This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.
SAFETY DATA SHEET (EC 1907/2006)
Degudent H

Material no. Specification VA-Nr Version Revision date Print Date Page
102703 102703 01,699,502 1.8 / GB 01.12.2014 01.12.2014 7 / 7

Legend
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ASTM American Society for Testing and Materials
ATP Adaptation to Technical Progress
BCF Bioconcentration factor
BetrSichV German Ordinance on Industrial Safety and Health
C.c. closed cup
CAS Chemical Abstract Services
CESIO European Committee of Organic Surfactants and their Intermediates
ChemG German Chemicals Act
CMR carcinogenic-mutagenic-toxic for reproduction
DIN German Institute for Standardization
DMEL Derived minimum effect level
DNEL Derived no effect level
EINECS European Inventory of Existing Commercial Chemical Substances
EC50 half maximal effective concentration
GefStoffV German Ordinance on Hazardous Substances
GGVSEB German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee German ordinance for sea transportation of dangerous goods
GLP Good Laboratory Practice
GMO Genetic Modified Organism
IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
ISO International Organization For Standardization
LOAEL Lowest observed adverse effect level
LOEL Lowest observed effect level
NOAEL No observed adverse effect level
NOEC no observed effect concentration
NOEL no observed effect level
O. C. o. c. open cup
OECD Organisation for Economic Cooperation and Development
OEL Occupational Exposure Limit
PBT Persistent, bioaccumulative, toxic
PEC Predicted effect concentration
PNEC Predicted no effect concentration
REACH REACH registration
RID Convention concerning International Carriage by Rail
STOT Specific Target Organ Toxicity
SVHC Substances of Very High Concern
TA Technical Instructions
TPR Third Party Representative (Art. 4)
TRGS Technical Rules for Hazardous Substances
VCI German chemical industry association
vPvB very persistent, very bioaccumulative
VOC volatile organic compounds
VwVwS German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK Water Hazard Class
WHO World Health Organization