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

1.1 Product identifier

Product name: Gold
CAS-No.: 7440-57-5
EC-No.: 231-165-9

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

Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555
Emergency Phone: +49 9287 881-174 (during office hours)
Fax: +49 9287 881-505
E-mail Address: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
none

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
none

Hazard pictograms:

Signalword:

Hazard statements: none
Precautionary statements: none
Additional information: -

2.3 Other hazards

All chemicals are potentially dangerous. Therefor they are to be handled exclusively by specially trained personnel and with the necessary care.

Results of PBT- und vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.
3. Composition / information on ingredients

3.1 Chemical characterization:
Substances
CAS-No. Description: 7440-57-5 Gold
Identification number(s):
EC number: 231-165-9
Formula: Au
Molar mass [g/mol]: 196.96

4. First aid measures

4.1 Description of first aid measures
General information: No special measures necessary.
After inhalation: When inhaling, remove the person into fresh air.
After skin contact: Wash off with soap and plenty of water.
After eye contact: Precautionary rinse with water and consult a physician in case of ailments.
After swallowing: Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5. Fire-Fighting measures

5.1 Extinguishing agents
Suitable extinguishing agents: Powder, water, CO2
For safety reasons unsuitable extinguishing agents: No restrictions regarding extinguishing agents.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
Protective equipment: In case of fire wear self-contained respiratory apparatus and full protective suit.

Additional information:

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation.
6.2 Environmental precautions
Do not release into sewers / ground water or soil.

6.3 Methods and material for containment and cleaning up
Pick up mechanically.
Dispose the material according to regulations.

6.4 Reference to other sections
Information for safe handling is available in Section 7.
Information concerning personal protective equipment can be read through in Section 8.
Appropriate disposal is described in Section 13.

7. Handling and storage

7.1 Precautions for safe handling
For proper use no special measures are necessary.
Information about fire and explosion protection:
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for safe storage, including any incompatibilities: No special requirements.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: No data available.
Recommended storage temperature: -

7.3 Specific end use(s)
No further relevant information available.

8. Exposure controls / personal protection

Additional information about design of technical facilities: No additional data; refer to Section 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace: none
Additional information: As a basis serve valid lists at the creation day.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures: No special measures required.
Individual protection measures: No special measures required.
Protection of hands: Impervious, mechanically lasting protective gloves.
Eye protection: Tightly sealed goggles.
Body protection: Protective work clothing.
9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
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<tbody>
<tr>
<td><strong>Appearance</strong></td>
</tr>
<tr>
<td>Form:</td>
</tr>
<tr>
<td>Colour:</td>
</tr>
<tr>
<td>Odour:</td>
</tr>
<tr>
<td>Odour threshold:</td>
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<tr>
<td>pH-value:</td>
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<table>
<thead>
<tr>
<th>Change in condition</th>
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<tbody>
<tr>
<td>Melting point / Melting range:</td>
</tr>
<tr>
<td>Boiling point / Boiling range:</td>
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<tr>
<td>Flash point:</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
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<tr>
<td>Ignition temperature:</td>
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<tr>
<td>Decomposition temperature:</td>
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<tr>
<td>Self-igniting:</td>
</tr>
<tr>
<td>Danger of explosion:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosion limits</th>
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</thead>
<tbody>
<tr>
<td>Lower:</td>
</tr>
<tr>
<td>Upper:</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
</tr>
<tr>
<td>Vapour pressure:</td>
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<tr>
<td>Density at 20°C:</td>
</tr>
<tr>
<td>Relative density:</td>
</tr>
<tr>
<td>Vapour density:</td>
</tr>
<tr>
<td>Evaporation rate:</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water:</td>
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<tr>
<td>Partition coefficient (n-octanol / water):</td>
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<table>
<thead>
<tr>
<th>Viskosity</th>
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<tbody>
<tr>
<td>Dynamic:</td>
</tr>
<tr>
<td>Kinematic:</td>
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</table>

9.2 Other information

No further relevant information available.
10. Stability and reactivity

10.1 Reactivity
See section 10.3

10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
Chemically stable.

10.3 Possibility of hazardous reactions
Danger of explosion when in contact with ammonia.
Exothermal reaction with oxidants.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No data available.

10.6 Hazardous decomposition products
No data available.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD / LC50 values relevant for classification:
There is no quantitative data regarding toxicity of the product available.

Potential health effects
Skin: No information available.
Eyes: No information available.
Inhalation: No information available.
Ingestion: No information available.
Sensitization: No sensitizing effects are known.

CMR effects
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.

Aspiration hazard:
No information available.

Specific target organ toxicity – single exposure:
The substance or mixture is not classified as specific target organ toxicant, one-time exposure.

Specific target organ toxicity – repeated exposure:
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Additional toxicological information:
As far as our experience goes, when properly handled according to the intended use this product has no adverse health effects.

Further information:
The product should be handled with the usual care as necessary for chemicals.

12. Ecological information

12.1 Toxicity
Aquatic toxicity
There is no quantitative data regarding aquatic toxicity of the product available.

12.2 Persistence and degradability
Persistence: No further relevant information available.
Degradability: No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Ecotoxic effects
Remark: -

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods
Recommendation: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations. Waste codes are to be assigned by the operator according to the respective application of the product.

Uncleaned packaging
Recommendation: Disposal same as for unused product.
14. Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
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<table>
<thead>
<tr>
<th>14.2 UN proper shipping name</th>
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<th>IMDG</th>
<th>IATA</th>
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<thead>
<tr>
<th>14.3 Transport hazard class(es) / -label</th>
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<tr>
<th>14.4 Packing group:</th>
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<tr>
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Transport hazard class(es):

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<th>Label:</th>
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Danger symbol:

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<tr>
<th>14.5 Environmental hazards:</th>
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<th>IMDG</th>
<th>IATA</th>
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<tbody>
<tr>
<td>no</td>
<td>no</td>
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14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Waterhazard class: Generally not hazardous for water.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other Information

Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

Disclaimer

For R&D use only. Not for drug, household or other uses.