



# SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006

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## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

### 1.1 Product identifiers

Product code: 45-42-252  
Product name: Iron oxide particles  
Surface: Au-labeled

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

Material for particle supported analytical applications in Life Sciences and for process control.  
See further information of uses/applications at web page [www.micromod.de](http://www.micromod.de).

### 1.3 Details of the supplier of safety data sheet

Company: micromod Partikeltechnologie GmbH  
Schillingallee 68  
D-18057 Rostock

### 1.4 Emergency telephone number

Emergency Phone: +49 381 / 7999 7000

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.  
This substance is not classified as dangerous according to Directive 67/548/EEC or 1999/45/EC.

### 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

### 2.3 Other hazards

The product does not fulfil the criteria for PBT or vPvB according to Annex XIII Regulation (EC) No. 1907/2006.

Powdery products could raise dust.

## 3. COMPOSITION /INFORMATION ON INGREDIENTS

Chemical nature: iron (II/III) oxide (Fe<sub>3</sub>O<sub>4</sub>, magnetite) [CAS: 1317-61-9]  
Au modified

Remarks: No disclosure requirement according to Regulation (EC) No. 1907/2006

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

After inhalation: Fresh air  
After skin contact: Wash with plenty of water. Remove contaminated clothing.  
After eye contact: Rinse with plenty of water. Contact doctor preventively  
After swallowing: Rinse mouth with water. Drink water. Consult doctor if feeling unwell.

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

We have no description of any toxic symptoms.

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

No information available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media: dry chemical or carbon dioxide, water spray, alcohol-resistant foam

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

No information available

### 5.3 Advice for firefighters

In the event of fire, wear self-containing breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe dust. Appropriate ventilation

### 6.2 Environmental precautions

No special precautionary necessary.

### 6.3 Methods and materials for containment and cleaning up

Product can diluted with water and removed by usual cleaning procedures.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid generation of dust.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep container tightly closed.  
room temperature  
Do not freeze.

### 7.3 Specific end uses

No data available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Do not contain components with workplace control parameters.

## 8.2 Exposure controls

### Appropriate engineering controls:

Appropriate working operations and technical measures

### Personal protective equipment:

General industrial hygiene practice  
Protective clothing needs to be selected specifically workplace.

*Eye/face protection:*  
Safety glasses

*Hand protection:*  
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC.

*Respiratory protection:*  
Respiratory protection is not required. Where protection from nuisance levels of dusts are requested, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

*Body Protection:*  
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Dark brown particles in water or powder, resp.
Odour:	Odourless
Odour threshold:	Not applicable
pH:	7,0 – 9,0 at 25 mg/ml (20 °C)
Melting point/freezing point:	No data available
Boiling point and boiling range:	ca. 100 °C (for dispersion supplied in water)
Flash point:	Not applicable
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1,1 – 1,5 g/ccm (20 °C)
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	Not applicable
Oxidizing properties:	Not applicable

### 9.2 Other Data

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No reaction with water, further data not available, see 10.3

### 10.2 Chemical stability

The product is chemically stable at storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity:	No data available
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative 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*

Offer surplus and non-recyclable solutions to a licensed disposal company.

*Contaminated packaging*

Dispose of as unused product.

### **14. TRANSPORT INFORMATION**

#### **Land transport (ADR/RID):**

**14.1 - 14.6** Not classified as dangerous in the meaning of transport regulations

#### **Inland waterway transport (ADN):**

**14.1 - 14.6** Not classified as dangerous in the meaning of transport regulations

#### **Air transport (IATA):**

**14.1 - 14.6** Not classified as dangerous in the meaning of transport regulations

#### **Sea transport (IMDG):**

**14.1 - 14.6** Not classified as dangerous in the meaning of transport regulations

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant

### **15. REGULATORY INFORMATION**

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

No information available.

#### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

### **16. OTHER INFORMATION**

*Training advice*

Provide adequate information, instruction and training for operators.

*Further information*

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Micromod Partikeltechnologie GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See further information at [www.micromod.de](http://www.micromod.de) and/or on invoices or packing slips for additional terms and conditions of sale.