



SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006

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

1.1 Product identifiers

Product code: 45-02-501
Product name: Iron oxide particles
Surface: COOH

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.

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 (Fe₃O₄, magnetite) [CAS: 1317-61-9]
COOH 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 and/or on invoices or packing slips for additional terms and conditions of sale.