

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



48800 Magnetite, very fine

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Revised edition: 01.09.2017

Version: 5

Printed: 24.08.2018

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Magnetite, very fine

Article No.: 48800

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

*Coloring agent (pigment and dyes), inorganic.
Technical application*

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

*Classification according to Regulation
(EC) No. 1272/2008 (CLP/GHS)*

*This product does not require classification and labelling as
hazardous according to CLP/GHS.*

*Classification according to Directive No.
67/548/EC or No. 1999/45/EC*

The material is not subject to classification according to EC lists.

Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

*Classification according to Regulation
(EC) No. 1272/2008 (CLP/GHS)*

No classification required according to the CLP/GHS guidelines.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

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2.3.

*After eye contact: can cause slight irritation.
After skin contact: can cause slight irritation.
After skin contact: long-term contact can cause irritation.*

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Magnetite, Fe₃O₄. Pigment Black 11, C.I. 77499

*Information on Components / Hazardous
Ingredients:*

Triiron tetraoxide (Fe ₃ O ₄), Pigment Black 11.77499; REACH Reg. No. 01-2119457646-28- 0008	97 - 100 %	CAS-Nr: 1317-61-9 EINECS-Nr: 215-277-5 EC-Nr:
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

No special measures required.

After inhalation:

Supply fresh air.

After skin contact:

*Wash off with plenty of water and soap. Consult a physician if
irritation persists.*

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Consult physician.
Remove contact lens.*

After ingestion:

After swallowing larger amount of product seek medical aid.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Eye contact: can cause mechanical irritation.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

All extinguishing agents suitable.

Unsuitable extinguishing media:

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None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

No special hazards.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Wear appropriate protective equipment. Keep spectators away.
Do not inhale dust.
Avoid contact with skin.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal. Avoid dust formation.

6.4. Reference to other Sections

See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Provide good ventilation and/or exhaust at the workplace. Ensure adequate ventilation. Handle and open container with care.

Hygienic measures:

Do not eat or drink during work. Do not smoke.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Protect against heat and direct sunlight.
Keep away from ignitable sources, heat and fire.
Store in tightly sealed containers in a dry room.*

Requirements for storage areas and containers:

*Keep container tightly closed.
Close open containers with care to avoid quality impairments by humidity.*

Information on fire and explosion

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protection:

Take measures to prevent electrostatic discharge.
Do not store together with inflammable products, sparks and open flames.

Storage class (VCI):

13; Non combustible solids

Further Information:

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Iron(II,III) oxide (CAS 1317-61-9):
3 mg/m³ (OEC; inhalable fraction, long-term exposure)
10 mg/m³ (OEC; inhalable fraction, short-term exposure)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Iron(II,III)-oxide (CAS 1317-62-9):
10 mg/m³ (worker, inhalation, long-term exposition - local effects)
3 mg/m³ (worker, inhalation, long-term exposition - local effects)

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Use appropriate local exhaust ventilation to control airborne levels.

Personal Protection

General protective measures:

Avoid contact with skin.
Do not inhale dust. Do not eat, drink or smoke while working.
Wash hands before breaks and at the end of work.

Respiratory protection:

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Environmental precautions:

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Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>black metallic</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>5 - 9 (50 g/l H₂O)</i>
<i>Melting temperature:</i>	<i>> 1500°C</i>
<i>Boiling temperature:</i>	<i>not applicable</i>
<i>Flash point:</i>	<i>not combustible</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>non-combustible</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>This product is a non-volatile solid.</i>
<i>Density:</i>	<i>5.2 g/cm³</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not applicable</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>not applicable</i>
<i>Viscosity, dynamic:</i>	
<i>Explosive properties:</i>	<i>Product does not present an explosion hazard.</i>

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Oxidizing properties:

not oxidizing

Bulk density:

1.8 - 2.5 g/cm³

9.2. Further Information

Solubility in solvents:

Soluble in strong acids.

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

10 µm

Other information:

10. Stability and Reactivity

10.1. Reactivity

Oxidation to Fe₂O₃. The reaction is exothermic.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if handled and stored according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid heat.

Thermal decomposition:

Product is instable above 120°C and can then oxidize causing additional heat. Do not store near sources of heat.

10.5. Incompatible Materials

None known.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD₅₀, oral:

> 5000 mg/kg (rat)

LD₅₀, dermal:

No information available.

LC₅₀, inhalation:

No information available.

Primary effects

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Irritant effect on skin:

Non irritating (rabbit)

Irritant effect on eyes:

Product dust may cause irritation.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Non sensitizing (guinea pig; OECD 406).

Mutagenicity:

Not mutagenic (Ames Test; Salmonella typhimurium: negative)

Reproductive toxicity:

No negative effects known.

Carcinogenicity:

Iron oxides are currently determined as non-cancerogenic substances according to IARC (International Agency for Research on Cancer). Magnetite, Fe₃O₄, is not listed in the IARC Monograph, Vol. 1-102.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

LC0: > 10000 mg/l (96h, Danio rerio)

Daphnia toxicity:

EC0: > 10000 mg/l (48h, Daphnia magna)

Bacteria toxicity:

No data available.

Algae toxicity:

No information available.

12.2. Persistency and Degradability

Very insoluble product and can thus be removed from water mechanically in suitable effluent treatment plants.

Not readily biodegradable.

12.3. Bioaccumulation

Not applicable.

12.4. Mobility

No information available.

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12. 5. Results of PBT- und vPvP Assessment

This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.

12. 6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

No special effects or hazards known.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

If possible reuse product.

Product can be taken to a waste disposal site according to local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled. Completely empty packaging can be disposed of with the regular waste.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

not applicable

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Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14. 8. Further Information

Do not store together with foodstuffs.

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

0, not hazardous (German Regulation)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this product.

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)

15. 3. Further Information

Regulation (EC) 2037/2000 - Substances that Deplete the Ozone Layer: not regulated / not applicable

RoHS Compliance: The products comply to the RoHS Directive 2002/95/EC and does not contain any Cr(VI).

Listed in the following inventories:

EINECS (EU), TSCA (US), AICS (AUS), DSL/NDSL (CA), ENCS (JP), KECI (KR), NZIoC (NZ), PICCS (PH), TCSI (TW), INSQ (MX), Swiss Code (G-8310)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.