

Safety Data Sheet

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



47501 Manganese Black

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Revised edition: 23.06.2017

Version: 2.0

Printed: 31.10.2018

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

1.1. Product Identifier

Product Name: Manganese Black

Article No.: 47501

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

Identified uses:

Stone, gypsum, cement, glass and ceramic articles

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)

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

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

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2.3.

*Do not inhale dust.
After inhalation: irritation of the respiratory system.*

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: (Fe,Mn)₃O₄. Pigment Black 33, C.I. 77537

Information on Components / Hazardous Ingredients:

Manganese ferrite black spinel; REACH Reg. No. 01-2119457599-19-0000	> 75 %	CAS-Nr: 68186-94-7 EINECS-Nr: 269-056-3 EC-Nr:
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Remove contaminated clothes.

After inhalation:

*Supply fresh air.
Consult physician if symptoms persist.*

After skin contact:

Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.

After eye contact:

Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.

After ingestion:

Rinse mouth with water and drink plenty of water.

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

Symptoms:

No further information available.

Effects:

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

Treatment:

No information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

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5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

*No special hazards.
Product is not flammable.*

5.3. Advice for Firefighters

Protective equipment:

Further information:

*Collect contaminated extinguishing water and debris separately;
avoid contamination of sewage system.*

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Ensure adequate ventilation.
Wear appropriate protective equipment. Keep spectators away.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

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

*For information for safe handling see Section 7.
Protective clothing, see Section 8.*

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:

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke
during work. Wash hands before breaks and at the end of work.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.

*Requirements for storage areas and
containers:*

No special measures necessary.

*Information on fire and explosion
protection:*

Storage class (VCI):

13; Non combustible solids

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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):

TRGS 900

TLV: 1.25 mg/m³ air-borne fraction (general dust limit)

TLV: 10 mg/m³ inhalable fraction (general dust limit)

Peak limit Category: 2 (II)

Parameters to be controlled:

Manganese ferrite (CAS 68186-94-7): TWA (EC): 0.2 mg/m³ (as Mn, inhalable fraction); 0.05 mg/m³ (as Mn, airborne fraction)

Derived No-Effect Level (DNEL):

Manganese ferrite (CAS 68186-94-7):

10 mg/m³ (worker, inhalation, long-term exposition - local effects)

10 mg/m³ (worker, inhalation, long and short-term exposition - systemic and local effects)

3 mg/m³ (worker, inhalation, long-term exposition - local effects)

3 mg/m³ (worker, inhalation, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Ensure adequate ventilation, especially in confined areas.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type P3.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Nitrile rubber (480 min, 0.4 mm)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Environmental precautions:

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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</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	
<i>Melting temperature:</i>	<i>> 1000°C (> 1832°F)</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>4.8 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>no information available</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>not determined</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	<i>not applicable</i>
<i>Oxidizing properties:</i>	

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not oxidizing

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

10. Stability and Reactivity

10.1. Reactivity

The product is stable.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

No further information available.

Thermal decomposition:

10.5. Incompatible Materials

None known.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral: > 10000 mg/kg (rat)

LD50, dermal: No information available.

LC50, inhalation: No information available.

Primary effects

Irritant effect on skin: No information available

Irritant effect on eyes: No information available.

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Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No relevant data found.

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

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)

Daphnia toxicity:

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

Bacteria toxicity:

EC50: > 10000 mg/l (3h, active sludge)

Algae toxicity:

No information available.

12.2. Persistency and Degradability

No information available.

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

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:

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Not considered to be environmentally harmful.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Recover or recycle if possible.

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

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

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14.5. Environmental Hazards

Not classified as environmentally hazardous.

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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

14.8. Further Information

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, Assessment by list)

Local regulations on chemical accidents:

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law (§ 22 JArbSchG) are to be observed.

The employment restrictions for women in child-bearing age are to be observed (§§4 und 5 MuSchRiV).

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.

15.3. Further Information

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.