

Safety Data Sheet

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



47501 Manganese Black

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Revised edition: 17.07.2019

Version: 2.0

Printed: 24.10.2019

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.com

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

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

1.4.2 Poison Center:

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.

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:

2.3. Other Hazards

Do not inhale dust.

After inhalation: irritation of the respiratory system.

Composition/Information on Ingredients

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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.

Do not induce vomiting.

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

Symptoms:

Gastro-intestinal complaints. May cause respiratory irritation.

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.

5.2. Special Hazards arising from the Substance or Mixture

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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:

13; Non combustible solids (TRGS 510)

Further Information:

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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)

Predicted No-Effect Concentration (PNEC):

Additional Information:

Manganese, inorganic compounds (DE BAT): 15 µg/l

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:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: black

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Odor:	odorless
Odor threshold:	No information available.
pH-Value:	7 - 10 (H ₂ O: 50 g/l)
Melting temperature:	> 1000°C (> 1832°F)
Boiling temperature:	not applicable
Flash point:	not combustible
Evaporation rate:	not applicable
Flammability (solid, gas):	non-combustible
Upper explosion limit:	no information available
Lower explosion limit:	no information available
Vapor pressure:	not applicable
Vapor density:	This product is a non-volatile solid.
Density:	4.5 -5 g/cm ³ (20°C)
Solubility in water:	insoluble
Coefficient of variation (n-Octanol/Water):	no information available
Auto-ignition temperature:	not applicable
Decomposition temperature:	not determined
Viscosity, dynamic:	not applicable
Explosive properties:	not applicable
Oxidizing properties:	not oxidizing
Bulk density:	< 1000 kg/m ³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

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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

Acids

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Not classified as acutely toxic.

Acute Toxicity

LD50, oral:

LD50, dermal:

LC50, inhalation:

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Non-irritating to eyes

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Non sensitizing.

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Mutagenicity:

Not mutagenic.

Reproductive toxicity:

No reproductive toxicity expected.

Carcinogenicity:

No cancerogenic effect known.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Repeated exposure: no organospecific toxicity expected.

Single exposure: no organospecific toxicity expected.

Additional toxicological information:

Aspiration hazard: not applicable

12. Ecological Information

12.1. Aquatic Toxicity

Not hazardous to the aquatic environment.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

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:

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.

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European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled.

Contaminated packaging must be disposed like the substance.

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.

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

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Water hazard class:

0, not hazardous (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

Manganese (Mn):

5.2.1. Total dust, including fine dust: > 25 wt-% (m >= 0.2 g/h, conc. 20 mg/m³)

5.2.2.: Inorganic dust (class. III): > 25 wt-% (m >= 5 g/h, conc. 1 mg/m³)

15.2. Chemical Safety Assessment

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

15.3. Further Information

Listed in the following inventories:

REACH (EC), TSCA (US)

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

RoHS Directive 2011/65/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS 2): not listed.

VOC Content (w/w): 0 %

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.