

Safety Data Sheet

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



48445 Iron Oxide Black 303 T, dark black

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Revised edition: 12.04.2021

Version: 3

Printed: 16.06.2021

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

1.1. Product Identifier

Product Name: Iron Oxide Black 303 T, dark black

Article No.: 48445

UFI: --

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

Identified uses:
Coloring agent (pigment and dyes), inorganic.

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

Dust may be produced when working with this material, which can
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cause a mechanical irritation of eyes, nose and respiratory tract.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: (Fe,Mn)₂O₃. Pigment Black 33, C.I. 77537

Information on Components / Hazardous Ingredients:

| | | |
|--|------------|--|
| Manganese ferrite black spinel; REACH Reg. No. 01-2119457599-19-0000 | 90 - 100 % | CAS-Nr: 68186-94-7 EINECS-Nr: 269-056-3 EC-Nr: |
|--|------------|--|

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. If required give artificial respiration. In case of complaints or unconsciousness consult a physician. In case of unconsciousness place patient stable in side position for transportation.

In case of unconsciousness place patient stable in side position for transportation.

Keep the airways open. Unfasten tight garments (collar, tie, belt).

After skin contact:

No special measures required.

After eye contact:

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

After ingestion:

No special measures required.

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

Symptoms:

No further information available.

Effects:

No further information available.

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

Treatment:

No further information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO₂), extinguishing powder, water spray.
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Unsuitable extinguishing media:

None known.

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:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear appropriate protective equipment. Keep spectators away.

Ensure adequate ventilation.

Avoid formation of dust.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

Contact local authorities if product pollutes soil or vegetation.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

6.4. Reference to other Sections

In case of emergency, see Section 1.

Protective clothing, see Section 8.

See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

No special measures necessary if properly handled.

Hygienic measures:

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

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store dry and in the original tightly sealed containers.

Requirements for storage areas and containers:

No special measures necessary.

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Information on fire and explosion protection:

No special measures necessary.

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

No information available.

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

Manganese ferrite (CAS 68186-94-7):

TLV: 0.02 mg/m³ (as Mn, airborne fraction), 0.2 mg/m³ (as Mn, inhalable fraction); 8(II)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

DNEL/DMEL:

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

Predicted No-Effect Concentration (PNEC):

Additional Information:

Workplace Exposure Limit (WEL): The user must take precautions to ensure that the environmental controls employed are adequate to maintain the exposure level below the WEL.

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. Wash contaminated clothes before reuse.

Respiratory protection:

Dust mask recommended when very dusty (with particle filter P1).

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Leather gloves(< 60 min)

Eye protection:

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Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

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>4 - 8 (5 %)</i> |
| <i>Melting temperature:</i> | <i>> 1000°C (>1832°F)</i> |
| <i>Boiling temperature:</i> | <i>not available</i> |
| <i>Flash point:</i> | <i>not available</i> |
| <i>Evaporation rate:</i> | <i>not applicable</i> |
| <i>Flammability (solid, gas):</i> | <i>not available</i> |
| <i>Upper explosion limit:</i> | <i>not determined</i> |
| <i>Lower explosion limit:</i> | <i>not determined</i> |
| <i>Vapor pressure:</i> | <i>not applicable</i> |
| <i>Vapor density:</i> | <i>No information available.</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>No information available.</i> |
| <i>Decomposition temperature:</i> | <i>No data available.</i> |

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Viscosity, dynamic:

not applicable

Explosive properties:

not applicable

Oxidizing properties:

no information available

Bulk density:

300 - 1000 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

No information available.

10.2. Chemical Stability

The product is stable.

10.3. Possibility of Hazardous Reactions

This material is considered to be stable.

10.4. Conditions to Avoid

Conditions to avoid:

No information available.

Thermal decomposition:

10.5. Incompatible Materials

No information available.

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:

> 10000 mg/kg (rat)

LD50, dermal:

not determined

LC50, inhalation:

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No information available.

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Non-irritating to eyes

Exposure to high ambient dust levels can cause irritation of the eyes.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effect (guinea pig).

Mutagenicity:

Manganese ferrite black spinel:

In vitro genetic-toxicity: Ames-Test negative (OECD 471)

In vitro genetic-toxicity: negative (OECD 476, mouse lymphoma cells)

In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Manganese ferrite black spinel:

Repeated exposure (inhalation): NOAEL: 10.1 mg/m³ (4 weeks, 6 hours/day, rat; OECD 412); Subacute toxicity

Repeated exposure (inhalation): NOAEL: 4.7 mg/m³ (13 weeks, 6 hours/day, rat m/f; OECD 413), Subchronic toxicity

Additional toxicological information:

Chronic effects:

Inhalation: Repeated or prolonged inhalation of dust can cause a chronic irritation of the respiratory tract.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

LC₀: > 100000 mg/l (96h, Danio rerio; OECD 203)

Daphnia toxicity:

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

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Bacteria toxicity:

EC50: > 10000 mg/l (3h, active sludge; OECD 209)

Algae toxicity:

EC50: > 100 mg/l (72h, Pseudokirchneriella subcapitata)

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

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

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.

Dispose of according to official national and 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:

Not hazardous goods

14.3. Transport Hazard Classes

ADR Class:

not applicable

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Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

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

Not classified as a dangerous good under transport regulations.

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 (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:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary 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)

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15.3. Further Information

Regulation (EC) 850/2004 - Persistent organic pollutants and amending Directive 79/117/EEC: not regulated / not applicable

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted

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

International Chemical Weapons Convention (CWC), list of the toxic chemicals and toxic chemical precursors: not forbidden and/or restricted

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.