

Safety Data Sheet

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



48350 Iron Oxide Brown 660, dark

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Revised edition: 28.06.2018

Version: 3

Printed: 31.10.2018

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

1.1. Product Identifier

Product Name: Iron Oxide Brown 660, dark

Article No.: 48350

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.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:

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: Mixture of Pigment Red 101.77491 (Fe₂O₃) and Pigment Black 11.77499 (Fe₃O₄).

Information on Components / Hazardous Ingredients:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air and keep patient calm.

If breathing is difficult call a physician.

Keep respiratory tract clear.

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

After skin contact:

Wash off with water.

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:

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:

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

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

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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:

Avoid formation of dust, wear protective clothing. Keep spectators away.

Ensure adequate ventilation.

Floor may be slippery; use care to avoid falling.

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:

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.

Dispose of contaminated material according to Section 13.

Protective clothing, see Section 8.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

No special measures required.

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:

Keep container tightly closed.

Information on fire and explosion protection:

No special measures necessary.

Storage class (VCI):

13; Non combustible solids

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):

Does not contain any components with workplace limit values.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Iron(III) oxide (CAS 1309-37-1):

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

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Ensure adequate ventilation, especially in confined areas.

Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.

Personal Protection

General protective measures:

Remove contaminated clothing. Wash hands after work.

Keep away from foodstuffs, beverages and feed.

Respiratory protection:

Dust mask.

Hand protection:

Protective gloves

Protective glove material:

Leather (< 60 min)

Eye protection:

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

Form: powder

Color: brown

Odor: odorless

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Odor threshold:

No information available.

pH-Value:

5 - 8 (5 %)

Melting temperature:

> 1000°C (> 1832°C)

Boiling temperature:

not applicable

Flash point:

not applicable

Evaporation rate:

This product is a non-volatile solid.

Flammability (solid, gas):

not applicable

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:

4.7 kg/l (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:

Product does not present an explosion hazard.

Oxidizing properties:

No information available.

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

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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

None if handled and stored according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid temperatures above 80°C: product can become instable and oxidize. Under unfavourable conditons, the additionally caused heat can lead to ignition of combustibile materials nearby. Therefore, do not store the product near sources of heat.

Thermal decomposition:

10.5. Imcompatible 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: > 5000 mg/kg (rat)

LD50, dermal:

No information available.

LC50, inhalation:

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:

Chronic effects : Repeated or prolonged inhalation of dust can

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cause a chronic irritation of the respiratory tract.

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:

By analogy with a product of similar composition.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

*LC50: > 1000 mg/l (48h, *Leuciscus idus*; OECD 203)*

Daphnia toxicity:

No information available.

Bacteria toxicity:

No data available.

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

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

12.6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

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No special effects or hazards known.

AOX Value:

No data available.

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

If product cannot be reused or recycled, it has to be disposed of according to current 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

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

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14. 5.	Environmental Hazards	<i>None</i>
14. 6.	Special Precautions for User	<i>Not classified as a dangerous good under transport regulations.</i>
14. 7.	Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code	<i>not applicable</i>
14. 8.	Further Information	<i>Do not store together with foodstuffs.</i>

15.	Regulatory Information	
15. 1.	Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture	
	<i>Water hazard class:</i>	<i>0, not hazardous (German Regulation, Assessment by list)</i>
	<i>Local regulations on chemical accidents:</i>	<i>Seveso III Directive: not applicable under Directive 2012/18/EC.</i>
	<i>Employment restrictions:</i>	
	<i>Restriction and prohibition of application:</i>	<i>EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable</i> <i>Chemical Weapons Convention (CWC), Lists of toxic chemicals and raw materials: not forbidden and/or restricted</i>
	<i>Technical instructions on air quality:</i>	
15. 2.	Chemical Safety Assessment	<i>A Chemical Safety Assessment is not necessary for this product.</i>
15. 3.	Further Information	<i>Regulation (EC) 850/2004 - Persistent organic pollutants and amending Directive 79/117/EEC: not regulated / not applicable</i> <i>Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable</i> <i>EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable</i>

16.	Other Information	<i>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.</i>
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