

Safety Data Sheet

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



40623 Manganese Brown Intense

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Revised edition: 06.07.2021

Version: 2.0

Printed: 10.08.2021

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

1.1. Product Identifier

Product Name: Manganese Brown Intense

Article No.: 40623

UFI: 4H00-60XY-N000-TJEN

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

Identified uses:
Used in surface refinement for ceramic products

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)

H361
Cat.: 2
Reproductive toxicity, hazard category 2
Suspected of damaging fertility or the unborn child.

Possible Environmental Effects:

2.2. Label Elements

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

Hazard designation:



GHS08-1

Signal word:

Warning

Hazard designation:

H361
Suspected of damaging fertility or the unborn child.

Safety designation:

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P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P308+P313	If exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Pigment Brown 8, C.I. 77727

Information on Components / Hazardous Ingredients:

Manganese(II,III) oxide (H361); REACH Reg.No. 01-2119448167-35-0006	95 - 100 %	CAS-Nr: 1317-35-7 EINECS-Nr: 215-266-5 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 immediately.

After inhalation:

Supply fresh air.

In case of irritation of the respiratory system seek medical help.

After skin contact:

Wash with soap and rinse with plenty of water.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes.

After ingestion:

Rinse mouth with water and drink plenty of water.

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 further information available.

5. Fire-Fighting Measures

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5.1. Extinguishing Media

Suitable extinguishing media:

*Foam, extinguishing powder, water spray.
Use extinguishing media for surrounding fire.*

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

No special hazards.

5.3. Advice for Firefighters

Protective equipment:

Wear suitable protective clothing.

Further information:

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

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Avoid formation of dust, wear protective clothing.
Ensure adequate ventilation.*

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.
Clean with water.*

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 adequate ventilation.
Avoid formation and deposition of dust. Provide adequate ventilation.*

Hygienic measures:

*Do not eat or drink during work. Do not smoke.
Do not inhale dust. Wash hands before breaks and at the end of work.*

7.2. Conditions for Safe Storage, including any Incompatibilities

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Storage conditions:

Store in tightly sealed containers in a dry room.

Keep away from humidity.

Requirements for storage areas and containers:

Information on fire and explosion protection:

Do not store together with: oxidants and acidic products.

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

No further information available.

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)

Manganese and its inorganic compounds: TLV: Average value: 0.2 mg/m³ (inhalable fraction), 0.02 mg/m³ (airborne fraction); Short-term value: 1.6 mg/m³ (inhalable fraction), 0.16 mg/m³ (airborne fraction); 1(II), Y

Parameters to be controlled:

Manganese and its inorganic compounds: IOELV (EC): Average value: 0.05 mg/m³ (airborne fraction)

Derived No-Effect Level (DNEL):

Manganese(II,III) oxide (CAS 1317-35-7): 0.2 mg/m³ (worker, inhalation, long-term exposition - systemic effects)

0.004 mg/kg bw/d (worker, skin contact, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Manganese(II,III) oxide:

Fresh water: 0.00014 mg/l

Sea water: 0.000014 mg/l

Fresh water sediment / Sea water sediment: 0.014 mg/kg

Soil: 0.014 mg/kg

Sewage treatment system (STP): 100 mg/l

Additional Information:

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

8.2. Exposure Controls

Technical protective measures:

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Use appropriate local exhaust ventilation to control airborne levels.

Personal Protection

General protective measures:

*Do not inhale dust. Do not eat, drink or smoke while working.
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:

*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>brown</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>not determined</i>
<i>Melting temperature:</i>	<i>> 600°C</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>

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Vapor pressure:

not applicable

Vapor density:

Density:

ca. 4.3 g/cm³ (20°C)

Solubility in water:

insoluble

Coefficient of variation (n-Octanol/Water):

not applicable

Auto-ignition temperature:

No information available.

Decomposition temperature:

Viscosity, dynamic:

not applicable

Explosive properties:

not applicable

Oxidizing properties:

not oxidizing

Bulk density:

< 1000 kg/m³

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

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Hazardous reaction with hydrochloric acid.

The product is not dust explosive when delivered. The accumulation of fine dust can however increase the risk of dust explosion.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.

Thermal decomposition:

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10.5. Incompatible Materials

*Oxidizing agents and acids.
Hydrochloric acid: formation of chlorine*

10.6. Hazardous Decomposition Products

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

*Is not classified as acutely toxic.
May be harmful if inhaled or swallowed.*

LD50, oral:

Manganese(II,III) oxide: LD50: > 2000 mg/kg (rat)

LD50, dermal:

No information available.

LC50, inhalation:

Manganese(II,III)-oxide: LC50: > 5.17 mg/kg (4h, rat)

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.

Mutagenicity:

Not mutagenic.

Reproductive toxicity:

May damage the unborn child. Suspected of damaging fertility.

Carcinogenicity:

Not cancerogenic.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: the substance or mixture is not classified as specific target organ toxicant.

Repeated exposure: the substance or mixture is not classified as specific target organ toxicant.

Additional toxicological information:

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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

No data available.

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:

*Dispose of according to official national and local regulations.
Do not empty into drains. Avoid release into the environment.
Refer to special instructions / Safety data sheets.*

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

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 / DOT (US) (land

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transportation).

IMDG/IATA:

Not hazardous goods

14.3. Transport Hazard Classes

ADR Class:

not applicable

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

Not classified as environmentally hazardous.

14.6. Special Precautions for User

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.

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:

Manganese (Mn):

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15.2. Chemical Safety Assessment

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)

A Chemical Safety Assessment has not been carried out for this product.

EC SVHC-List (REACH, Annex XIV): not listed

15.3. Further Information

Listed in the following inventories:

REACH (EC), TSCA (US)

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: 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.