

Safety Data Sheet

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



54610 Cast-Iron Powder

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Revised edition: 06.12.2023

Version: 1

Printed: 06.12.2023

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

1.1. Product Identifier

Product Name: Cast-Iron Powder

Article No.: 54610

UFI: --

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

Identified uses:

*Industrial use
Water treatment
Manufacture of chemicals*

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:

See Section 12.

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:

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2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Information on Components / Hazardous Ingredients:

Iron; REACH Reg. No. 01-2119462838-24-xxxx 100 %

CAS-Nr: 7439-89-6

EINECS-Nr: 231-096-4

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

After inhalation:

Take affected person to fresh air.

If breathing is difficult call a physician.

After skin contact:

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

After eye contact:

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

Seek medical attention if irritation persists.

After ingestion:

Rinse mouth with water and drink plenty of water.

Do not induce vomiting. Consult physician immediately.

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

Symptoms:

Inhalation: can cause irritation of nose, throat and trachea.

Skin contact: prolonged contact may cause irritations.

Eye contact: can cause mechanical irritation.

Effects:

No further information available.

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:

Use extinguishing media for surrounding fire.

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Extinguishing powder.

Unsuitable extinguishing media:

Molten metal can react violently with water. Avoid that molten iron flows into water or water into molten iron. Should water be surrounded by molten iron, this could cause a vigorous release of vapor and gases. DO NOT APPLY WATER, CO2 OR FOAM DIRECTLY ONTO THE MATERIAL ITSELF.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

The product is not flammable.

Danger of dust explosion caused by very finely suspended dust particles in the air. In the case of this product this is rather improbable due to its particle size.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

Cool exposed containers with water mist.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust, wear protective clothing.

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:

Avoid dust formation.

Spillage should be cleared with vacuum equipment, protected against static electricity.

6.4. Reference to other Sections

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:

Avoid formation of dust.

Provide adequate ventilation.

Hygienic measures:

Avoid contact with skin, eyes and clothing. Do not inhale dust.

Take off contaminated clothing immediately. Store working clothing separately.

Keep away from foodstuffs and drinks. Do not eat, drink or smoke

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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 location to avoid the oxidation of the material.

Requirements for storage areas and containers:

Store product in closed containers.

Information on fire and explosion protection:

Self-ignition resp. auto-oxidation is possible.

Take measures to prevent electrostatic discharge.

Dust explosion class 1 (Kst-value > 0 - 200 bar m/s).

Do not store together with: strong oxidants and acids.

Storage class:

Further Information:

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):

Parameters to be controlled:

Iron (CAS 7439-89-6), (BG, SK, TWA): 6 mg/m³

Iron (CAS 7439-89-6), (CZ, TWA): 10 mg/m³

Derived No-Effect Level (DNEL):

Iron (7439-89-6):

0.71 mg/kg bw/day (consumer, swallowing, long-term exposure - systemic effects)

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

1.5 mg/m³ (consumer, inhalation, short-term exposure)

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation.

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:

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Wear protective mask, particle filter P2 or FFP2 or NIOSH N95 (for solid and liquid particles, EN 143, 149) if dust occurs.

Hand protection:

Not required

Protective glove material:

For long-term exposure: nitrile or butyl rubber (BTT>480 min, 0.7 mm).

Eye protection:

Not required.

Body protection:

Protective clothing.

Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form:

powder

Color:

gray

Odor:

odorless

Odor threshold:

no information available

pH-Value:

not available

Melting temperature:

1450°C

Boiling temperature:

2861°C

Flash point:

not applicable

Evaporation rate:

not applicable

Flammability (solid, gas):

not flammable

Upper explosion limit:

no information available

Lower explosion limit:

no information available

Vapor pressure:

not applicable

Vapor density:

No information available.

Density:

not available

Solubility in water:

insoluble

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Coefficient of variation (n-Octanol/Water):

not applicable

Auto-ignition temperature:

not applicable

Decomposition temperature:

No decomposition if used according to specifications.

Viscosity, dynamic:

not applicable

Explosive properties:

Product does not present an explosion hazard.

Oxidizing properties:

none

Bulk density:

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

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if used according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.

Accumulation of fine dust presents a potential risk of dust explosion and if a ignition source is present.

Thermal decomposition:

No further information available.

10.5. Incompatible Materials

Strong oxidizing agents.

Strong acids.

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10.6. Hazardous Decomposition Products

The product does not decompose.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

Product is not toxic.

LD50, oral:

Iron: 7500 mg/kg bw (rat)

LD50, dermal:

LC50, inhalation:

Iron (dust): LCLo: 250 mg/m³ (6h)

Primary effects

Irritant effect on skin:

Continuous contact can cause irritation.

Irritant effect on eyes:

Dust may irritate eyes.

Inhalation:

Can cause irritation of the respiratory system.

Ingestion:

May cause indisposition and vomiting.

Sensitization:

Non sensitizing.

Mutagenicity:

Not mutagenic (Ames-Test; OECD 471)

Reproductive toxicity:

No information available.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Aspiration hazard:

No risk of aspiration.

11.2. Information on other Hazards

No further information available.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

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Iron: LC50: 0.56 mg/l (96h; Cyprinus carpio semi-static); 13.6 mg/l (96h; Morone saxatillis static)

Daphnia toxicity:

No information available.

Bacteria toxicity:

no information available

Algae toxicity:

Iron: ErC50: 4.9 mg/l (72h)

12.2. Persistency and Degradability

Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12.3. Bioaccumulation

No bioaccumulation.

12.4. Mobility

Iron and its compounds are found in the environment in the form of hydroxides. In the form of oxides they have a long-term stability.

12.5. Results of PBT- und vPvP Assessment

This substance is not classified as PBT (persistent, bioaccumulative, toxic), nor as vPvB (very persistent, very bioaccumulative).

12.6. Endocrine Disrupting Properties

No data available.

12.7. Other Adverse Effects

Water hazard class:

Behaviour in sewage systems:

Further ecological effects:

No ecological problems expected.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

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), (and next page) 9

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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

None

14.6. Special Precautions for User

none known

14.7. Maritime Transport in Bulk according to IMO Instruments

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:

1, slightly hazardous for water (German Regulation, Assessment by list)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

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15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not 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.