Material Safety Data Sheet
According to regulation (EC) No. 1907/2006 (REACH)

48289 Iron Oxide Red, micronized

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

1.1. Product Identifier

Product Name: Iron Oxide Red, micronized
Article No.: 48289

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
EMail: 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 EC Regulation 1272/2008
This product does not require classification and labelling as hazardous according to CLP/GHS.

Classification according to EC Regulation No. 67/548 or No. 1999/45
The material is not subject to classification according to EC lists.

Safety Phrases:
Possible Environmental Effects:

2.2. Label Elements

Classification according to EC Regulation 1272/2008
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
3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture


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: Use extinguishing media for surrounding fire.

Unsuitable extinguishing media: None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards: Product is not flammable.
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. Protective clothing, see Section 8. Dispose of contaminated material according to Section 13.

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:

7. 3.  Specific End Use(s)
8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TSGS 900 (D 9/13): Fe₂O₃, CAS 1309-37-1
TLV: 3 mg/m³ (8h) airborne fraction (average value).
Short term value: 20 mg/m³ (15 min) airborne fraction.
TLV: 10 mg/m³ (8h) inhalable dust (average value)

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):
10 mg/m³ (worker, inhalation, long-term exposition - systemic effects)
10 mg/m³ (worker, inhalation, long-term exposition - 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:

Eye protection:
Safety glasses with protective shields (EN 166).

Body protection:
Protective clothing.

Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder
Color: reddish brown
Odor: odorless
Odor threshold:
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pH-Value: ca. 5 (40 g/l, 20°C)
Melting temperature: 1562°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: 5.2 kg/dm³
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: 450 - 600 g/l

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
None if handled and stored according to specifications.

10.4. Conditions to Avoid
Conditions to avoid:

Thermal decomposition:
No information available.

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:
LD50, dermal:
No information available.

LC50, inhalation:
Primary effects
Irritant effect on skin:
Non irritating

Irritant effect on eyes:
Non-irritating to eyes

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

Ingestion:
No information available

Sensitization:
Not sensitizing (guinea pig; OECD 406).
Mutagenicity:

In vitro genetic-toxicity: Ames-Test negative
In vitro Mammalian Cell Gene Mutation Test (OECD 476): negative
In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative

Reproductive toxicity:
No data available.

Cancerogenity:
Negative, intraperitoneal (600 mg/kg, rat, 914 days; 3 injections / 200 mg/kg in 8 weeks)

Teratogenicity:
No information available.

Specific target organ toxicity (STOT):
No data available.

Additional toxicological information:
By analogy with a product of similar composition.

12. Ecological Information

12.1. Aquatic Toxicity

Fe2O3

Fish toxicity: LC0: 50000 mg/l (96h, Danio rerio)

Daphnia toxicity: EC50: > 100 mg/l (48h, Daphnia magna; OECD 202)

Bacteria toxicity: EC50: > 10000 mg/l (3h, active sludge)

Algae toxicity: No information available.

12.2. Persistence and Degradability

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

12.3. Bioaccumulation
No information available.

12.4. Mobility
No information available.

12.5. Results of PBT- und vPvP Assessment
Not applicable.

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: 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 no.:

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

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
   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
   
   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.

15. 3. Further Information
   Seveso II Directive: this product is not regulated under this directive.

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.