

# Material Safety Data Sheet / Safety Data sheet

## Iron (II) Oxide

### Section 1: Chemical Product Identifier and Synonyms

Product Name: Iron (II) Oxide

UN Number: 3178

CAS Number: 1345-25-1

Synonym: Ferrous Oxide, Iron Monoxide

Chemical Formula: FeO

### Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Iron (II) Oxide	1345-25-1	>98.5%

**Toxicology Data On Ingredients:** Iron (II) Oxide LD50: Not Available. LC50: Not Available

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

May be harmful if inhaled. May cause respiratory tract irritation.

May be harmful if absorbed through skin.

May cause skin irritation.

May cause eye irritation.

May be harmful if swallowed.

#### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

### Section 4: First Aid Measures

#### Eye Contact:

Flush eyes with water as a precaution.

**Skin Contact:**

Wash off with soap and plenty of water. Consult a physician.

**Inhalation:**

If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Section 5: Fire and Explosion Data**

**Flammability of the Product:** Flammable in the presence of a source of ignition, through friction or retained heat. Keep away from heat/sparks/open flame/hot surface. No smoking.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:** Not available.

**Risks of explosion of the product in presence of mechanical impact:** Not available.

**Risks of explosion of the product in presence of static discharge:** Not available.

**Fire Fighting Media and Instructions:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Wear self-contained breathing apparatus for firefighting if necessary.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

**Section 6: Accidental Release Measures****Small Spill:**

Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Large Spill:**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations.

## Section 7: Handling and Storage

### **Precautions:**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

### **Storage:**

Keep container tightly closed in a dry and well-ventilated place. Air sensitive. Keep in a dry place.

## Section 8: Exposure Controls / Personal Protection

### **Engineering Controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

### **Personal Protection:**

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter.

### **Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### **Exposure Limits:**

Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Powder.

**Odour:** Not available.

**Taste:** Not available.

**Molecular Weight:** 71.84 g/mole

**Colour:** Black/Brown

**pH (1% soln/water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** Not available.

**Critical Temperature:** Not available.

**Specific Gravity:** Not available. (Water = 1)

**Vapour Pressure:** Not available.

**Vapour Density:** Not available.

**Volatility:** Not available.

**Odour Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.  
**Dispersion Properties:** Not available.  
**Solubility:** Not available.

## Section 10: Stability and Reactivity Data

**Stability:** Product is stable under normal conditions.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Heat, flames and sparks. Extremes of temperature and direct sunlight.  
**Incompatibility with various substances:** Not available.  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Not available.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Inhalation. Ingestion.  
**Toxicity to Animals:** (LD50): Not available. LC50: Not available.  
**Chronic Effects on Humans:** Not available.  
**Other Toxic Effects on Humans:** Not available.  
**Special Remarks on Toxicity to Animals:** Not available.  
**Special Remarks on Chronic Effects on Humans:** Not available.  
**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.  
**BOD5 and COD:** Not available.  
**Products of Biodegradation:** Not available.  
**Toxicity of the Products of Biodegradation:** Not available.  
**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Information

**Waste Disposal:** Dispose of in accordance with local regulations

## Section 14: Transport Information

**DOT Classification:** Class:4.1

**Identification:** Flammable solid, inorganic, n.o.s. (iron oxide) UN Number:3178 PG: II

**Special Provisions for Transport:** Not available.

## Section 15: Regulatory Information

**Regulations:** Labelling according to Regulation (EC) No 1272/2008.

## Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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