

MATERIAL SAFETY DATA SHEET

SUBSTANCE/PREPARATION NAME:

Iron Powder

COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Nature

Iron Powder CAS-No. 7439-89-6 EINECS-No. 231-096-4

POSSIBLE HAZARDS:

Critical hazards to man and the environment: IN BULK:Highly flammable
Dust Explosion Hazard

FIRST AID MEASURES:

On skin contact: Irritation not expected. Wash with soap and water. Obtain medical attention if irritation should be encountered.

Eye contact: Possible irritation through mechanical action of dust particles. Irrigate the eye thorough with clean water. Obtain medical attention if symptoms persist.

Ingestion: Ingestion may result in gastric disturbances. Obtain medical attention if large quantities have been ingested.

FIRE FIGHTING MEASURES:

Suitable for extinguishing media: Use foam, Co2, Water Spray or Dry Powder

Unsuitable for extinguishing medium for safety reasons: None

The following can be given off in a fire: Iron Oxide, Dust

Special protective equipment: None

ACCIDENTAL RELEASE MEASURES:

This material, like most materials in powder form, is capable of creating a dust explosion in large quantities.

Personal precautions: Avoid dust formation

Methods for cleaning up: Sweep/shovel up. Dispose of in accordance with Local Authority Regulations.

HANDLING AND STORAGE:

Handling: Sources of ignition should be kept clear. Avoid dust formation.
Avoid shock and friction.

Storage: Keep away from heat.

PHYSICAL AND CHEMICAL PROPERTIES:

Form: Powder
Colour: Grey
Odour: Odourless

Change in physical state

Melting point / Melting range: 1535°C

Boiling point / Boiling range: 2730°C

Combustibility: Highly flammable

Explosion Limits:
-lower >200g/m³ (VDI 3673)
-upper

Ignition temperature: >150°C (self heating)

Density: 7.8g/cm³ (DIN)

Bulk density: 3000-4000kg/m³

Solubility in water: Insoluble

pH value in water: Neutral

STABILITY AND REACTIVITY:

In a dry state: Stable

Conditions to avoid: Keep away from heat. Like most materials in powder form dust may form explosive mixture in air.

Substances to avoid: Hazardous reactions: Highly flammable
Dangerous reaction with acids
Formation of: Hydrogen

Hazardous decomposition of products: None

TOXICOLOGICAL INFORMATION:

Acute toxicity

LD50/oral/rat: >5000mg/kg

Experience in humans

Direct contact with the eyes can cause irritation of the mucous membrane

ECOLOGICAL INFORMATION:

Elimination Information

Local effluent treatment regulations should be complied with.
Not readily water soluble, inorganic product. May be virtually separated mechanically in purification plant.

Ecotoxic effects

The product has not been tested. Due to its consistency and lack of water solubility, bio-availability is unlikely.

EXPOSURE STANDARDS / PERSONAL PROTECTION:

Occupational Exposure Standards

None assigned - manufacturer recommended figure 10mg/m³
8 hour TWA total inhalable dust of 5mg/m³ 8 hour TWA of respirable dust

Ventilation

Preferably local exhaust ventilation. This must be adequate to keep exposure below the occupational exposure standard

Respiratory Equipment

Where adequate ventilation cannot be provided personal respiratory equipment must be used.

Skin Protection

May be used if handling large quantities

Eye Protection

May be used if handling large quantities

Other special requirements

Protective hand creams are beneficial

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties.

Recipients of our product must take responsibility for observing existing laws and regulations.

We shall not be held liable for any damage resulting from handling or from contact with the above product.