

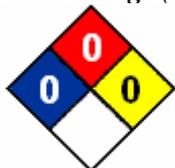
Material Safety Data Sheet (MSDS)

1 Identification of the substance and of the company

- .Product name: IRON POWDER
- .Product name: CNPC-FE
- .End uses: Powder metallurgy
- .Manufacturer/Supplier: CNPC POWDER GROUP CO.,LTD
- .Address: Room 303,Building B, No.568 West Jinshajiang Road, Shanghai, China 201803
- .Tel: +86-21-6900 5580
- .Fax: +86-21-6091 9255
- .E-mail: gracege@cnpcpowder.cn
- .Further information obtainable from: CNPC POWDER GROUP CO.,LTD
- .Emergency Telephone Number: +86-158 2164 8761
- .Contact: Grace

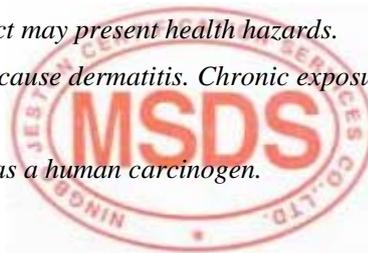
2 Hazards identification

- .NFPA ratings (scale 0 - 4)



Health = 0; Fire = 0; Reactivity = 0

- .Classification of the substance or mixture
- .Classification according to Regulation (EC) No 1272/2008: The product is not classified according to the CLP regulation.
- .Classification according to GHS : Not applicable.
- .Labelling according to Regulation (EC) No 1272/2008: Not applicable.
- .Signal word: Not applicable.
- .Hazard statements: Dust will causes eye, skin, and respiratory tract irritation,and harmful if inhaled or swallowed.
After inhalation: Shortage of breath, pain, coughing, fever.Danger of lung oedema / lung irritation cannot be ruled out.
After ingestion of high quantities: Nausea, vomiting, stomach ache. Damage of digestive system, kidneys, liver damage.
Powder may cause eye irritation, Direct contact will cause physical scratch harm.
- .Precautionary statements: Do not breathe dust. Avoid powder contact with eyes and long time contact with skin.
- .Potential Health Effects: Smoke and dust generated during smelting contact may present health hazards.
- .Chronic or Special Toxic Effects: Prolonged or repeated skin contact may cause dermatitis. Chronic exposure may cause dizziness, dry throat, sleepiness, anorexia, and nausea.
- .CARCINOGENICITY: Not listed by ACGIH, IARC, NTP, or CA Prop 65 as a human carcinogen.
- .MUTAGENIC EFFECTS: Not available.
- .TERATOGENIC EFFECTS: Not available.



3 Composition/information on ingredients

.This product contains the following ingredient at levels subject to reporting requirements of:

Components	CAS No.	Approximate By Wt. (%)	Air Exposure Limits (mg/m3)	
			ACGIH TLV (mg/m3)	OSHA PEL (mg/m3)
Iron (Fe)	7439-89-6	99%	5 Oxide Dust/Fume	10 Oxide Dust/Fume
Other	-- -- --	1%	Not Established	Not Established

4 First aid measures

- .Eye Contact:* In case of overexposure to dusts or fumes, immediately flush eyes with plenty of water for at least 15 minutes occasionally lifting the eye lids. If iron powder into the eyes, Avoid rubbing the eyes. Get medical attention if irritation persists. Thermal burns should be treated as medical emergencies.
- .Skin Contact:* In case of overexposure to dusts or particulates, wash with soap and plenty of water. Get medical attention If irritation develops or persists. If thermal burn occurs, flush area with cold water and get immediate medical attention.
- .Inhalation:* In case of overexposure to dusts or fumes, remove to fresh air. Get immediate medical attention if symptoms described in this MSDS develop.
- .Ingestion:* Not considered an ingestion hazard. However, if excessive amounts of dust or particulates are swallowed, Treat symptomatically and supportively. Never give anything by mouth to an unconscious person, Get medical attention.

5 Fire-fighting measures

- .General Information:* As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating and/or harmful metal oxide fumes.
- .Flammable Limits (% volume in air):*Not applicable
- .Extinguishing Media:* For molten metal, use water, Foam-Fog.
- .Special Fire Fighting Procedures:* Firefighters should not enter confined spaces without wearing NIOSH/MSHA approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment, keep safety distance and wear suitable protective clothing.
- .Unusual Fire or Explosion Hazards:* Not applicable

6 Accidental release measures

- .Precautions if Material is Spilled or Released:* This product is solid, Small leak is meaningless, where have scattered on the ground only need to clean up it, Scrap should be reclaimed for recycling.

- .Environmental Precautions:** Product may contain reportable quantities of alloying elements.
- .Waste Disposal Methods:** Dispose unused product in accordance with applicable Federal, State, and Local regulations.

7 Handling and storage

- .Storage Temperatures:** Stable under normal temperatures and pressures.
- .Precautions to be Taken in Handling and Storing:** Store in a dry place ,keepaway from strong acids and strong oxidizers , Avoid breathing dusts or fumes.

8 Exposure controls/personal protection

- Operations with potential for generating high concentrations of airborne particulates or fumes should be evaluated and controlled as necessary.**
- .Eye Protection:** Generally do not need. Dust resistant safety goggles are recommended under circumstances where particles Could cause mechanical injury such as grinding or cutting.
- .Skin:** Generally do not need, When machine Appropriate protective gloves should be worn as necessary. Good personal hygiene practices should be followed Including cleansing exposed skin several times daily with soap and water and laundering or dry cleaning soiled work clothing.
- .Respiratory Protection:** NIOSH/MSHA approved dust/fume/mist respirator should be used to avoid excessive exposure. See Section 3 for component material information exposure limits. If such concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA) Follow all applicable respirator use, fitting, and training standards and regulations.

9 Physical and chemical properties

.General Information	
Form:	Solid powder
Color:	Dark gray
Odor:	Odorless
.Change in condition	
Melting point/Melting range:	1500~1600 °C
Boiling point/Boiling range:	About 2800 °C
.Flash point:	Not applicable
.Self-igniting:	Product is not self-igniting
.Density:	
.Relative density:	>1(water=1)
.Vapor density:	Not available
.Evaporation rate	Not available
.Solubility in/Miscibility with	
Water:	Insoluble

10 Stability and reactivity

- .Stability:** The product is stable.
- .Conditions to Avoid:** Metal at temperatures above the melting point may liberate fumes containing metal oxides.
- .Incompatibility (Materials to Avoid):** Strong acid(such as sulfuric acid, hydrochloric acid, nitric acid...)
- .Hazardous Decomposition Products:** Metallic fumes and metal oxides may be produced during burning, and possibly machining or any situation with the potential for thermal decomposition.

11 Toxicological information

- .Toxicity to Animals:**
 - LD50: Not available.
 - LC50: Not available.
- .Potential Chronic Effects on Humans:** Long-term exposure to iron dusts or fumes can result in a condition called siderosis which is considered to be a benign pneumoconiosis. Symptoms may include chronic bronchitis, emphysema, and shortness of breath upon exertion. Penetration of iron particles in the skin or eye may cause an exogenous or ocular siderosis which may be characterized by a red-brown pigmentation of the affected area. Ingestion overexposures to iron may affect the gastrointestinal, nervous, and hematopoietic system and the liver. Iron and steel founding, but not iron or iron oxide, has been listed as potentially carcinogenic by IARC.
- .Other Toxic Effects on Humans:** None

12 Ecological information

- .Aquatic Ecotoxicological:** No specific information available on this product.
- .Environmental Fate Data:** No specific information available on this product.

13 Disposal considerations

- .Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. Dispose in accordance with federal, state, and local health and environmental regulations. Prevent materials from entering drains, sewers, or waterways.**

14 Transport information

- .DOT Proper Shipping Name:** Not regulated
- .UN Number :** Not applicable
- .Packing Group:** Not applicable
- .Marine Pollutant:** Not.
- .DOT Hazard Classification:** Not regulated
- .ADR/RID Classification:** Not controlled under ADR(Europe)
- .IMO/IMDG Classification:** Not Controlled under IMDG
- .ICAO/IATA Classification:** Not controlled under IATA.

15 Regulatory information

.This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, dusts and fumes from this product may be hazardous.

.CALIFORNIA PROPOSITION 65: None of the chemicals in this product are listed.

.Regulatory Lists: Some components of this product may be specifically listed by individual states; other product-specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

.Toxic Substances Control Act (TSCA): most components are listed.

.International Regulations

.WHMIS: Not controlled under WHMIS

.DSCL: Not controlled under DSCL

.State Regulation: No products were found.

.REACH Regulation List of Substances of very high concern (SVHC) : None of the ingredients is listed.

.Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The contents and format of this MSDS are in accordance with ISO Commission Directive ISO11014:2009, And CLP Regulation(EC) No 1272/2008.

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

• Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

*****The End*****