



## Material Safety Data Sheet

Product Name: 40MPU

Chemical ID: Black Buna Rubber

Date: 10/18/2019

**Hazardous Components:** None

OSHA PEL'S & ACGIH TLV's do not apply to substances that are no longer in particulate form.

### **SECTION A:**

#### **Physical/Chemical characteristics:**

Boiling pt.	NA*
Specific gravity (water=1)	> 1.0
Vapor pressure (mm Hg)	NA
Melting point	NA
Evaporation rate	NA
Soluble in water	NA

\*NA = not applicable

**Appearance:** rubber solid, characteristics odor & black color.

### **SECTION B:**

#### Fire/Explosion Hazard Data

According to the provisions set forth in 29CFR 1200.1910, this product is not considered to be a fire/explosion hazard.

Keep away from ignition source during processing.

Unusual fire & explosion hazards: None

Stability: This product is stable



## **SECTION B (CONT.)**

### **Hazardous Decomposition Products:**

1. Usual rubber hydrocarbons
2. Oxides of nitrogen
3. Oxides of zinc
4. Oxides of carbon

## **SECTION C:**

1. Signs & symptoms of exposure: NA
2. Emergency of first aid procedure NA

## **SECTION D:**

### **Health Hazard Data:**

1. Possible irritant to skin & eyes: NA
2. At elevated temperatures, produces fumes which may irritate skin, eyes & mucous membranes.
3. Do not ingest
4. Avoid fume inhalation

## **SECTION E:**

### **Precautions for safe use & handling:**

1. In processing, keep away from ignition sources
2. Store in cool, dry place
3. During processing – local ventilation preferred; general ventilation acceptable
4. Wash thoroughly after handling

## **SECTION F:**

Spill control & disposal: NA

Waste disposal: dispose of in accordance with Federal, state & local laws

## MATERIAL SAFETY DATA SHEET

### *Section 1- Chemical Product and Company Identification*

**Product Identification:** Nickel Powder

**Other name:** Nickel Dust; Nickel Metal;

**Manufacturer's Name:** CNPC Powder Group Co., Ltd

**Manufacturer's Address:** Room 1211, No.8 Office building Wanda plaza, 58 HeXuan Road, Shanghai.

**Postcode:** 201803

**Email Address:** Inquiry@cnpcpowder.com

**Fax:** 86-21-60919255

**Emergency Telephone:** 86-21-69005580

### *Section 2- Composition/Information on Ingredients*

CAS#	Chemical Name	%
7440-02-0	Nickel Powder	>99.5

### *Section 3- Hazards summarizing*

#### **EMERGENCY OVERVIEW**

**Appearance:** Grey black solid.

#### **Potential Health Effects**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

**Inhalation:** Dust is irritating to the respiratory tract. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. When inhaled as a dust or fume, may cause benign pneumoconiosis.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

### *Section 4- First-Aid Measures*

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with

plenty of soap and water.

**Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical aid if cough or other symptoms appear.

### *Section 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. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

#### **Extinguishing Media:**

Do NOT use carbon dioxide. If water is the only media available, use in flooding amounts. Use dry sand, dry chemical, soda ash or lime.

**Autoignition Temperature:** Not available.

**Flash Point:** Not available.

**Explosion Limits lower:** Not available.

**Explosion Limits upper:** Not available.

**NFPA Rating: (estimated) Health: 1;**

**Flammability: 3;**

**Instability: 3**

### *Section 6-Accidental Release Measures*

**General Information:** Use proper personal protective equipment as indicated in Section 8.

#### **Spills/Leaks:**

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

### *Section 7- Handling and storage*

#### **Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

#### **Storage:**

Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

### *Section 8- Exposure Controls/Personal Protection*

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### *Section 9- Physical and chemical properties*

**Physical State:** Solid

**Color:** grey black

**Odor:** none reported

**pH:** Not applicable.

**Vapor Pressure:** 1810 deg C

**Vapor Density:** Not available.

**Evaporation Rate:** Not applicable.

**Viscosity:** Not applicable.

**Boiling Point:** 2732 deg C

**Freezing/Melting Point:** 1455 deg C

**Decomposition Temperature:** Not applicable.

**Solubility in water:** Slightly soluble in hot water.

**Specific Gravity/Density:** 8.9

**Molecular Formula:** Ni

**Molecular Weight:** 58.7

### *Section 10- Stability and Reactivity Data*

**Conditions to Avoid:**

Incompatible materials, moisture, exposure to air, excess heat.

Incompatibilities with Other Materials:

Acetaldehyde, ammonium peroxodisulfate, chloroformamidinium, chloric acid, ammonium nitrate, halogens, dinitrogen tetroxide, nitryl fluoride, polystyrene, sodium acetylide, potassium dichromate, peroxyformic acid, nitryl fluoride, sulfuric acid, sodium carbide, strong oxidizers, phosphorous, halogens.

Hazardous Decomposition Products: Oxides of iron.

**Hazardous Polymerization:** Has not been reported.

### *Section 11- Toxicological information*

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** No information available.

---

### *Section 12- Ecological Information*

**Other:** No information available.

### *Section 13- Disposal Considerations*

Chemical waste generators must determine whether a discarded chemical is class if as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part Additionally, waste generators must consult state and local hazardous waste ensure complete and accurate classification.

### *Section 14- Transport Information*

**CHINA TDG**

No information available.

**US DOT**

No information available

### *Section 15- Regulatory Information*

**Rule of law information:** N/A

### *Section 16- Other Information*

**Date MSDS prepared:** 04<sup>th</sup> Sep 2014

**Submitter:** CNPC Powder Group Co., Ltd

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

---

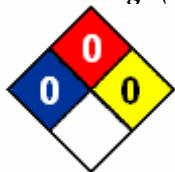
## Material Safety Data Sheet (MSDS)

### 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.

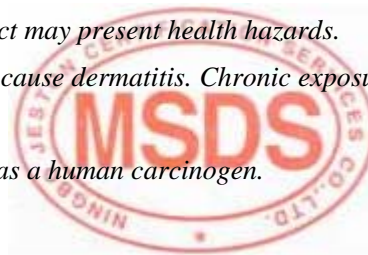
**.Potential Health Effects:** Smoke and dust generated during smelting contact may present health hazards.

**.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

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