# 锌粉安全技术说明书

## **Material Safety Data Sheet of zinc Powder**

第一部分 化学品及企业标识

Section 1: Chemical product and company identification

1、 化学品中文名: 锌粉;

Chinese name of the chemical product: Zinc Powder

2、 企业名称: 成都锦淳金属材料有限公司

Company name:

地 址:中国四川成都

Address: Chengdu City, Sichuan Province, China

邮 编: 610101

Post Code: 610101

电 话: 028-61535659

**Telephone NO**.: 028-61535659

第二部分 成分/组成信息

**Section 2: Composition / information on ingredients** 

CAS 号: 7440-66-6 CAS No.:7440-66-6 相对分子质量: 65.409 Molecular Weight: 65.409

分子式: Zn

Chemical Formula: Zn 化学类别: 金属粉体

Chemical Type: Metallic Powder

Chemical Type: Weather Toward			
Chemical	CAS No	Ratio	
Zn	7440-66-6	97.23%	
Pb	7439-62-1	0.004%	
Fe	7439-89-6	0.003%	
Cd	7440-43-9	0.003%	

#### 第三部分 健康影响

**Section 3: Health Effects** 

刺激皮肤和眼睛接触。吸入会引起耳垂和粘液膜的刺激。眼睛发炎会引起水泡和发红。出现眼睛发等皮肤问题信息,遵循安全的工业卫生标准及时就医。

Irritating to the skin and eye on contact. Inhalation will cause irritation to lugs and mucus membrane. Irritation to eyes will cause watering and redness. Reddening calin gandit cheingare characterictic of skin information follow safe industrial hygiene ractices.

第四部分 危险性概述

**Section 4: Hazards Overview** 

侵入途径: 吸入、皮肤接触

Inhalation methods: Inhalation, skin contact

健康危害:对皮肤黏膜具有刺激性。

Health Hazard: May cause skin irritation.

环境危害:对水生生物毒性极大。

Environmental Hazard: Highly toxic to aquatic organisms.

燃爆危险: 受热或接触火焰可能会产生膨胀或爆炸性分解。

Explosion conditions: Heating or contact with flames may cause expansion or explosive decomposition.

## 第五部分 急救措施

**Section 5: First Aid Measures:** 

皮肤接触: 用肥皂水及清水彻底冲洗皮肤

**Skin Contact:** Wash exposed area with soap and water. Get medical advice if irritation develops.

眼睛接触:用大量流动清水或生理盐水彻底冲洗,严重时洗后就医。

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

吸 入: 迅速脱离现场至空气新鲜处。

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

食 入: 饮足量温水,催吐,就医。

**Ingestion:** Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

## 第六部分 消防措施

**Section 6: Fire Fighting Measures** 

灭火方法及灭火剂:干粉。

Fire-fighting measures and extinguishing media: Dry powder.

**灭火注意事项及措施**:避免用太强烈的水汽灭火,因为他可能会使火苗蔓延分散;灭火时,应佩戴呼吸面具,并穿上全身防护服。

Fire-fighting comments and measures: Avoid using too strong water vapor to extinguish the fire, as it may spread and disperse the flames; When extinguishing a fire, one should wear a breathing mask and full body protective clothing.

#### 第七部分 泄漏应急处理

#### Section 7: Accidental Release Measures

应急行动:隔离泄漏污染区,限制出入:切断泄漏污染区火源、水源

**Emergency action:** Segregate the area of lead or spill, remove the sources of ignition and water from the polluted area.

应急人员防护: 应急人员配戴防尘面具、建议穿隔热服、使用防爆工具

**Personnel protective measurements:** wear dust-proof mask, heat-proof clothes and use the explosion prevention tools and equipments.

环保措施、消除方法: 避免扬尘、用洁净的铲子收集于干燥、洁净、密封的容器中

**Environmental protective measurements:** avoid powder flying, collect the Pick up spill for recovery or disposal and place in a closed container.

第八部分 操作处置与储存

**Section 8: Handling and storage:** 

操作处置注意事项:操作人员必须经过专门培训,严格遵守操作规程。建议操作人员 佩戴自吸过滤式防尘口罩,戴化学安全防护眼镜,穿防静电工作 服。远离火种、热源,工作场所严禁吸烟。使用防爆型的通风系统 和设备,避免粉尘扬起,避免与氧化剂、酸、碱类接触。搬运时要 轻装轻卸,防止包装及容器损坏。配备相应品种和数量的消防器材 及泄漏应急处理设备。倒空的容器可能残留有害物。

Handling: Operators must pass special trade, obey the operating rules. Suggest operators wear filter-type dust-proof respirator, chemical safe goggles, static-free working clothes. Far away from sources of ignition and heat and smoking is not allowed in working area. Apply explosion prevention ventilation system and equipment. Avoid power flying and contact with oxidant, acids and alkalis. Load and unload slightly and protect package from breaking out. Prepare the related suitable extinguisher with full quantity and accidental release handling devices. It may leave harmful materials in emptied out containers.

**储存注意事项:**储存于干燥、通风的库房。远离火种、热源;库房内湿度不大于 85%。包装密封。应于氧化剂、酸、碱类分开存放,切忌混储。与门窗间距大于 1 米。采用防爆型照明、通风设施。不宜久存,以免变质。配备相应的品种和数量的消防器材;储区应备有合适的材料收集收容泄漏物。

Storage: Store in day and ventilated warehouse. Be far away from sources of ignition and heat. Humidity of the warehouse should max 85%. Stored in separated place against oxidant, acids and alkalis and shouldn't be swapped. Use explosion prevention ventilation and lighting devices. Be not stored in long time to avoid out of date. Prepare the related suitable extinguisher with full quantity; There are suitable containers to pick up the leaking powder.

第九部分 暴露控制/人体防护

Section 9: Exposure controls / personal protection

中国 MAC (mg/m³): 未制定标准 China MAC

(mg/m³): NO Standard 前苏联 MAC (mg/m³):

Te former Soviet Union MAC (mg/m³): 2[AL]

美国 TLV-TWA: 未制定标准 TLVTN:ACGIH 10mg/m³[粉尘], 5mg/m³[焊接烟雾] USA TLV-TWA: NO Standard TLVTN:ACGIH 10mg/m³[dust]/ 5mg/m³ [welding smoke]

美国 TLV-STEL: 未制定标准 TLVWN: 未制定标准

USA TLV-STEL: NO Standard TLVWN: NO Standard

监测方法:

工程控制: 密闭操作,加强通风。提供淋浴和安全设备。

**Project Control:** Operation in a closed devise, be well ventilated in the workshop. Supply the shower and safety devise.

**呼吸系统防护:** 可能接触其粉尘时,必须佩戴自吸过滤式防尘口罩。必要时,佩戴空气呼吸器。

**Respiratory tract protection:** must wear protective mask when contacting the powder, if necessary, wear air-purifying respirators

眼睛防护: 戴化学安全防护眼镜。

Eye Protection: Use chemical safety goggles.

身体防护: 穿防静电工作服。

**Body protection:** wear antistatic working clothes.

**手防护:** 戴防静电作业防护手套。

Hands' protection: wear antistatic gloves.

**其他防护:** 工作场所禁止吸烟、进食和饮水,饭前要洗手。工作完毕,淋浴更衣。注意个人清洁卫生。实行就业前和定期体检,防止尘肺。

**Additional information:** No smoking, eating and drinking in the workshop, wash the hands before eating. Wash thoroughly and change the clothing after handling. Do physical examination regularly if contacting the powder with a long time.

# 第十部分 理化特性

Section 10: Physical /chemical properties

外观与性状:浅灰色粉状颗粒

**Appearance:** Fine, light-gray powder.

沸点(℃):907

Boiling point (℃):907

熔点(℃): 419

Melting point (℃): 419 相对密度(水=1): 7.14 Relative density: 7.14

临界温度(℃): 无意义

Critical temperature (°C): Meaningless

临界压力(MPa): 无意义

Critical press (MPa): meaningless

闪 点: 无资料

Flash point: No Data

溶解性: 与水、乙醇反应,不溶于其它有机溶剂

Solubility: react with water and ethanol, insoluble in other organic solvents.

主要用途: 金属颜料、化工催化、喷涂等

Mainly applications: metal pigment, chemical catalyst, painting and so on.

其他理化性质: 微米级颗料,不含有机物,无放射性、腐蚀性。

Other chemical and physical properties: microns grade powder, no organic, no radioactive and corrosive.

第十一部分 稳定性和反应活性

**Section 11 Stability and Reactivity** 

稳定性: 稳定

Stability: Stable

聚合危害: 不能发生

Hazardous Polymerization: Will not occur.

避免接触条件:火种、热源、潮湿空气

Avoid contact: fire, heat and humid air.

Conditions to Avoid: flames, heat, moisture

禁忌物:水、酸、碱、强氧化剂

Taboo: water, acids, alkalis and strong oxidant.

第十二部分 毒理学资料

**Section 12** Toxicological Information

急性毒性: LD50: 无资料

LC50: 无资料

Acute toxicity: LD50: No Data

LC50: No Data

刺激性: 对眼睛轻度刺激

Irritation: light stimulate to eyes

致敏性: 无资料

Allergenicity: No Data

亚急性和慢性毒性: 无资料

Sub-acute and chronic toxicity: No Data

致突变性: 无资料

Mutagenicity: No Data

致畸性: 无资料

Teratogenicity: No Data

致癌性: 无资料

Carcinogenicity: No Data

第十三部分 生态学资料

**Section 13 Ecological Data** 

生物效应: 该物质对环境有危害,对哺乳动物应给予特别注意。

Biological effect: This substance is harmful to environment, please pay special attention

to mammal.

生物降解性: 无资料

Biodegradable: No Data 非生物降解性: 无资料

Non-biodegradable: No Data

生物富集: 无资料

**Bioconcentration**: No Data

环境迁移: 无资料

Environmental migration: No Data

第十四部分 废弃处理

**Section 14** Waste Disposal

**废气物性质:** 不属于危险废弃物

Waste characters: not belong to hazardous waste

**废弃方法:** 除之前应参阅国家和地方有关法规。若可能回收使用,也可安全掩埋法处置

**Waste:** must follow the laws of the Country and location before dispose it. If can recycling, also can bury safety.

废弃注意事项:建议操作人员佩戴自吸过滤式防尘口罩。

Disposal attentions: Suggest the operator wear self-priming and filter to dust mask.

第十五部分 运输信息

Section 15 Transport Data

UN 编号: 3077 UN No:3077



运输标签:

Packing mark:

包装类别: II 类包装 052

Packing Group: II 主要危险类别: 9

Main hazard categories:9

**包装方法:** 装入双层敷膜编织袋,内衬双层 HDPE 袋密封;或装入 0.5 毫米厚的铁桶中,内衬 HDPE 袋密封。

**Packing:** put into the double-coated bags, sealing with double-coated HDPE (High Density Polyethylene) bags in inner. Or put into the steel drums, 0.5mm thick, with double-coated HDPE bags sealing.

运输注意事项:铁路运输应严格按照铁道部《危险货物运输规则》中的危险货物配装表进行配装。铁路运输时禁止溜放。起运时包装要完整,装载应稳妥。运输过程中要确保容器不泄漏、不倒塌、不坠落、不损坏。严禁与氧化剂、酸、碱类等混装混运。运输时运输车辆应配备相应品种和数量的消防器材及泄露应急处理设备。运输途中应防曝晒、防雨淋,防高温,防抛洒泄露,中途停留应远离火种、热源。运输用车、船必须干燥,并有良好的防雨设施。车辆运输完毕应进行彻底清扫。

Attentions: Railway transportation should be strictly accordance with the Ministry of Railway's the Transportation of Dangerous Goods Rules in the distribution of dangerous goods loaded table for compatibility. It is ban to put away when the goods on railway transportation. It should be packing well when shipment, loading should be safe. During the shipment, must ensure the containers no leaking, no collapsing, not falling, no damage. It is strictly prohibited shipping mix with oxidizer, acids, bases,

etc. Transportation vehicles should be equipped with the corresponding variety and quantity of the leak and fire equipment and emergency equipment. During the transport should anti-exposure, anti-rain, anti-high-temperature, anti-leaking and throwing and sprinkling, and it should stop away from fire and heat. The vehicles and vessels must be dry, and have good water-resistant facilities. The vehicles must be cleaning completely after transporting.

#### 第十六部分 法规信息

#### Section 16 Laws and Regulations Data

化学危险物品管理条例(1987 年 2 月 17 日国务院发布), 化学危险物品安全管理条例实施细则(化劳发[1992]677 号), 工作场所安全使用化学品规定([1996]劳部发 423 号)等法规, 针对化学危险品的安全使用、生产、储存、运输、装卸等方面均作了相应规定: 常用危险化学品的分类及标志(GB13690-92)将该物质划分为第 9 类对水生生物有极大危害。

Dangerous Chemical Goods Regulations (published by the State Council in February 17, 1987), the Implementation of Details of Chemical Safety Management of Dangerous Goods Regulations (published by chemical labor council [1992] NO.677), Regulations Safety Using Chemical Goods in Workplace ([1996] NO. 423 Labor Departement published) etc, all give the regulations focus on hazardous chemicals using, producing, storage, transportation and handling: The classification and mark of usual dangerous chemical goods divided it into 9 categories pose great harm to aquatic organisms.

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