

一. Identifications of Substance and Company

物品與廠商資料

1.1 Product Name: RUBBER REINFORCING FILLER-A

物品名稱: A 級鋅氧粉

1.2 Producer(supplier): GUANZHOU BAIYUN XINGGONG CHEMICAL LTD

製造商 (供應商名稱): 廣州白雲信港化工有限公司

1.3 Address: 204,FLOOR 2,BUILDING D, NO.206,YUEXI STREET, TONGDE STREET,BAIYUN DISTRICT,GUANGZHOU

地址: 廣州市白雲區同德街粵溪大街 206 号 D 栋二楼 204

1.4 Phone: 020-86488586

二. Composition /Information on Ingredients

成份辨識資料

2.1 Zinc compound CAS NO: 1314-13-2

鋅化合物 $\geq 82\%$ 化学文摘登记号:

2.2 Moisture

水分 $\leq 3\%$

2.3 Other additives

其他助剂 $\leq 15\%$

2.4 Chemical name : Zinc Oxide

化学名称: 氧化鋅

三. Hazards Identifications

危害辨識資料

3.1 Hazard class

危險性類別 GHS09 environment



GHS/CLP Regulation (EC)No 1272/2008: Hazardous substances for water environment (acute toxicity) class 1 H400; Hazardous substances in the aquatic environment (slow toxicity) class 1 H410

GHS/CLP 規例(EC)第 1272/2008 号: 水环境之危害物质 (急毒性) 第 1 级 H400; 水环境之危害物质 (慢毒性) 第 1 级 H410

3.2 Health hazard: Repeated contact is irritating to the skin and eyes. Inhalation may cause thirst, itching, ingestion may cause nausea, vomiting.

健康危害: 反复接触对皮肤有刺激, 对眼睛有刺激。吸入可能出现口渴、咽痒, 食入可能出现恶心、嘔吐。

3.3 Environmental hazard: It may cause long-term harmful effects in the aquatic environment.

環境危害: R50/53 对水生生物有毒, 在水生环境可能会引起长期有害作用。

3.4 Safety suggestions: S60 (substances and containers must be placed as hazardous waste), S61 (prevent discharge to the environment)

安全建议: S60 (物质及容器必须按危险废物放置)、S61 (防止排向环境)

3.5 Explosion hazard: Non-combustible

燃爆危險: 本品不燃

四. First-aid Measures

急救措施

- 4.1 **Inhalation:** Move to fresh air. If breathing is difficult, give oxygen and send to a doctor immediately.
吸入：移至新鮮空氣處。如呼吸困難，給輸氧，立即送醫。
- 4.2 **Skin contact:** Take off contaminated clothes and wash with soapy water and running water.
皮膚接觸：脫去污染衣着，用肥皂水和流動清水沖洗。
- 4.3 **Eye contact:** Lift the eyelids, rinse them with flowing water or normal saline for 15 minutes and send them to hospital immediately.
眼睛接觸：提起眼瞼，用流動的清水或生理鹽水沖洗 15 分鐘，立即送醫。
- 4.4 **Eating:** Brush your mouth thoroughly and take milk, soybean milk or egg white orally. If you swallow too much, please send to a doctor immediately.
食入：徹底刷口，口服牛奶、豆漿或蛋清，如吞食過量，請立即送醫。

五. Fire-fighting Measures

滅火措施

- 5.1 **Extinguishing Media:** Use water mist, chemical dry powder, foam or carbon dioxide extinguisher
適用滅火劑：用水霧、化學干粉、泡沫或二氧化碳滅火劑
- 5.2 **Not suitable for fire cutting:** there is no limit to the extinguishing agent applied to this substance or mixture.
不適用滅火劑：施用于此物質或混合物的滅火劑無限制。
- 5.3 **Hazardous combustion products :** ZnO
有害燃燒產物：氧化鋅
- 5.4 **Firemen should wear fire-resistant or fire-resistant clothing, face mask, helmet and gloves, and positive pressure self-contained breathing equipment (SCBA).**
滅火注意措施及防護措施：消防人員需穿戴耐火或防火的衣服，同時穿戴面罩，頭盔和手套，正壓自給式呼吸設備（SCBA）。
- 5.5 **Fire extinguishing guidance:** Prevent dilution of the controlled area from entering rivers, sewers or drinking water supplies.
滅火指導：防止控區的稀釋流出進入河流、下水道或飲用水供應系統。

六. Accidental Release Measures

洩漏處理方法

- 6.1 **Small amount of leakage:** Avoid raising dust, sweep it carefully and collect it in a closed container. It can also be washed with a large amount of water and diluted into the wastewater system.
小量泄漏：避免揚塵，小心掃起，收集于密閉容器中。也可用大量水沖洗，洗水稀釋後放入廢水系統。
- 6.2 **Massive leakage:** Collect, recycle or transport to waste treatment site for disposal.
大量泄漏：收集回收或運至廢物處理場所處置。
- 6.3 **Other:** Avoid drainage into the sewer
其它：避免排入下水道

七. Safe operation and Storage

安全操作與儲存方法

- 7.1 **Operational matters:** Closed operation, local exhaust. Wear dust masks, eye protection, latex gloves and protective clothing. Lightly load and unload, Wash thoroughly with water and soap after work.
操作事項：密閉操作，局部排風。佩帶防塵口罩，防護眼睛，乳膠手套及防護服。工作完後應用水

和肥皂彻底清洗。

7.2 Storage method: Store in a cool, dry and ventilated warehouse, away from heat and ignition sources.

Separate from acid, base and oxidizer. Separate from magnesium and chlorinated rubber.

儲存方法：儲存於陰涼乾燥通風的庫房，遠離熱及引火源。與酸、鹼、氧化劑分開存放。與鎂、氯化橡膠分開存放。

八. Contact and Precaution

接觸與防護措施

8.1 Occupational exposure concentration

职业暴露浓度

1. 8 hour-TWA (mg/m³)

1. 八小时日时量平均容许浓度：5 mg/m³

2. 15 min-STEL (mg/m³)

2. 短时间时量平均容许浓度：10 mg/m³

3. PEL-CEILING

3. 最高容许浓度：--

8.2 Respiratory protection: 1. 50~125 mg/m³: Constant flow oxygen supply breathing protection; Or anti-dust, fog drops and smoke of the dynamic air quiet breathing protection.

呼吸系统防护：1. 50~125 mg/m³: 定流量式供氧式呼吸防护具；或防粉尘、雾滴及烟熏之动力型空气清静式呼吸防护具。

250 mg/m³: full type air 流 clean breathing protection with high efficiency 流 material; Or comprehensive self-carrying respirator; Or all - round oxygen - supplied breathing protection equipment.

250 mg/m³: 具高效率流材之全面型空气流清式呼吸防护具；或全面型自携式呼吸防护具；或全面型供氧式呼吸防护具。

8.3 Eye protection: If contact is likely, protective eyes with protective wings are recommended.

眼睛防护：如果有可能发生接触，建议使用带护翼的防护眼睛。

8.4 Body protection: Work protective clothing.

身体防护：工作防护衣。

8.5 Hand protection: Protective gloves.

手防护：防护手套。

8.6 Other protection: Smoking, eating and drinking are prohibited at the work site. Shower and change clothes after work. Keep good hygiene habits.

其它防护：工作现场禁止吸烟、进食和饮水。工作完毕，淋浴更衣。保持良好的卫生习惯。

8.7 Protective equipment (Graphics)

防护设备(图形)



九. Physical and Chemical Property

物理及化學性質

9.1 Exterior: White powder, odorless

外觀：白色粉末，无臭。

9.2 Molecular formula:

分子式：ZnO

9.3 PH: 9.5±1.0

9.4	Melting point: 熔点(°C): 1975°C
9.5	Boiling point: 沸点(°C): 2360°C
9.6	Spontaneous combustion temperature: Meaningless 自燃温度(°C): 无意义
9.7	Critical temperature (°C): Meaningless 临界温度(°C): 无意义
9.8	Critical pressure (MPa): Meaningless 临界压力(MPa): 无意义
9.9	Flash point: 闪点(°C): 1436°C
9.10	Ignition temperature: This product is not flammable 引燃温度: 本品不易燃
9.11	Explosive upper/Lower limit %(V/V) : non-explosive 爆炸上限/下限%(V/V): 非爆炸物
9.12	Vapor pressure: 蒸气压: --
9.13	Vapor density: >1 (air =1) 蒸气密度: >1 (空气=1)
9.14	Density: 密度: 5.4 /cm ³
9.15	Solubility: The solubility of water is 1.6ppm@29°C, soluble in acid, sodium hydroxide aqueous solution. 溶解性: 水中溶解度为 1.6ppm@29°C, 可溶于酸、氢氧化钠水溶液。

十. Stability and Reactivity

安定性及反应性

- | | |
|------|--|
| 10.1 | Stability: Storage at room temperature in the closed original is stable.. It is stable during normal handling, use and transportation. Stable in the allowed heating range and exposure to air.
安定性: 在封闭的原装中室温贮藏是安定的。在通常的处理、使用和运输过程中是安定的。在允许的加热范围和暴露在空气中是安定的。 |
| 10.2 | Hazardous reactions during special condition: Dangerous polymerization does not occur
特殊状况下可能之危害反应: 危险聚合反应不会发生。 |
| 10.3 | Hazardous decomposition products: No data available
危害分解产物: 无资料 |
| 10.4 | Materials to avoid: Strong oxidants, strong acids and bases, chlorine compounds, magnesium.
应避免之物资: 强氧化剂、强酸强碱、氯化物、镁。 |
| 10.5 | Other: Avoid dust
其它: 避免产生粉尘 |

十一. Toxicological Information

毒性资料

11.1	Acute toxicity: 1.Eat 急毒性: 1. 食入 LD50 >5000 mg/kg (rat) (OECD 401) 2. Skin 2. 皮肤 LD50 >2000 mg/kg bw (rat) (OECD 402) 3. Inhalation 3. 吸入 LC50/4h >5.7 mg/l (rat) (OECD 403)
11.2	Toxicity: No data 亚急性和慢性毒性: 無
11.3	Thrill: No data 刺激性: 無
11.4	Mutagenicity: No data 致突变性: 無
11.5	Teratogenicity: No data 致畸性: 無
11.6	Carcinogenicity: No data 致癌性: 無
11.7	Others: Zinc is a trace element needed by all tissues of the body to maintain normal physiological functions. Zinc compounds are generally absorbed only in trace amounts in the digestive tract. 其它: 锌为身体各组织所需、维持正常生理功能的微量元素。一般锌化合物在消化道中仅能微量吸收。

十二. Ecological Information

生態資料

12.1	Ecotoxicological toxicity: 生态毒理毒性: 1. Toxicity to fish 1. 对鱼类毒性: LC50 , 0.169 mg/L <i>Oncorhynchus mykiss</i> 2. Toxicity to daphnia and other aquatic invertebrates: 2. 对水蚤和其他水生无脊椎动物毒性: EC50 , 0.413 mg/L <i>Ceriodaphnia dubia</i> NOEC , 0.082 mg/L <i>Daphnia magna</i> 3. Toxicity to algae: 3. 对藻类毒性: IC50 , 0.137 mg/L <i>Pseudokirchneriella subcapitata</i> NOEC , 0.082 mg/L <i>Pseudokirchneriella subcapitata</i>
12.2	Biodegradability: No data 生物降解性: 無
12.3	Non biodegradability: No data 非生物降解性: 無
12.4	Bioaccumulation: this product does not have bioaccumulation, zinc is a natural element, and is one of the elements required for the growth and development of all organisms 生物蓄积性: 本品不具有生物蓄积性, 锌为天然元素, 且为所有生物成长发育所需元素之一。



十三. Disposal Method

廢棄處置方法

- 13.1 Nature of waste: This product is harmless if handled in a standard manner. Refer to relevant national and local regulations before disposal. Incineration is recommended.
废弃物性质：本产品若按标准的方法处置是没有危害的。处置前应参阅国家和地方有关法规。建议用焚烧法处置。
- 13.2 Waste disposal method: dispose, bury, burn or recycle according to the requirements of relevant national and local laws and regulations.
废弃处理方法：根据国家和地方有关法规的要求处置，掩埋、焚烧或回收处理。
- 13.3 Precautions for waste: it is forbidden to flow directly into the sewer.
废弃注意事项：禁止直接流入下水道

十四. Transport Information

運輸信息

- 14.1 Transport number of dangerous goods No.: UN3077
危险货物运输编号：UN3077
- 14.2 IMDG rule page: --
IMDG 规则页码：--
- 14.3 Classification of transport hazards:  
运输危害分类：9 级，海洋污染物
- 14.3 Packing mark:
包装类别：III
- 14.4 Applicable Name of transport: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,N.O.S.(Zinc oxide)
适用运输名称：氧化锌
- 14.5 Domestic transport regulations: According to the national road traffic safety regulations
国内运输规定：根据国家道路交通安全规则
- 14.6 Other: Less than or equal to 5kg/L packaging, not belonging to the ninth category of dangerous goods.
其它：小于或等于 5kg/L 的包装，不属于第九类的危险品。

十五. Statute Information

法規資料

- 15.1 Occupational Safety and Health Act
职业安全卫生法
- 15.2 Hazardous chemicals labeling and General knowledge rules
危害性化学品标示及通识规则
- 15.3 Road traffic safety rules
道路交通安全规则
- 15.4 Storage, removal and disposal methods and facility standards for business waste
事业废弃物保存清除处理方法及设施标准
- 15.5 Permissible exposure standards for workers in workplaces
劳工作业场所容许暴露标准
- 15.6 Measures for the assessment and grading administration of hazardous chemicals
危害性化学品评估及分级管理办法

十六. Other Information

其他資料

16.1 Statement: This SDS is based on our current knowledge and provides the correct safety precautions required for chemicals. This document is not a guarantee of the characteristics of the product, nor is it a legally binding contractual relationship. This note is for industrial use only and should not be used for pharmaceutical or other purposes.

声明：本 SDS 是以我们现有的知识而撰写，提供了有关化学品所需正确的安全注意事项。此文件并非为产品特性之保证，也不为具有法律效力的合同关系。本说明仅供工业生产使用，不能用作药物或其它用途。

16.2 Reference

参考文献

1. Global Harmonization system for GHS Chemicals
GHS 化学品全球调和制度
2. Classification, Labelling and Packaging of Chemical Substances and Mixtures
化学物质和混合物分类、标示与包装法规 (Regulation(EC)No.1272/200/)
3. Xingang Chemical Laboratory analyzed data
信港化工实验室分析数据

16.3 Drawing by: GUANZHOU BAIYUN XINGGONG CHEMICAL LTD

製表單位：廣州白雲信港化工有限公司

16.4 Data review: Xingang Chemical Laboratory, He Songwen

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