

化学品安全技术说明书

Safete data sheet for chemical products

商品名称/ Trade Name: 氧化锌 (间接法) / Zinc Oxide (indirect method)

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1. 化学品及企业标识/ Identification of the substance/mixture and of the company/undertaking

1.1 产品识别/Product identifier

商品名/ Trade name:

氧化锌 (间接法) / Zinc oxide(indirect method)

CAS 编号/CAS No.:

1314-13-2

EINECS 编号/EC No.:

215-222-5

索引编号/Index No.:

030-013-00-7

1.2 产品的有关使用信息及禁止用途/ Relevant identified uses of the product and uses advised against 产品的推荐用途/ The purpose of the product

主要用于橡胶、塑料、油漆、石化、玻璃、陶瓷、颜料、电池、水泥、医药及饲料等行业。

This product is used in the manufacture of pigment, cosmetics, medicine, food additives, etc.

产品的限制用途/ Restrictions on the use of the product:

仅供工业使用。

For industrial use only.

1.3 企业信息/ Enterprise information

生产商/ Manufacturer:

潍坊奥龙锌业有限公司

Weifang Orlon Zinc Industry Co., Ltd.

地址/ Address:

山东省潍坊市寒亭区北海工业园珠江南街 00008 号

No.00008, Pearl River South Street, Beihai Industrial Park, Hantig District, Weifang, Shandong

电话/ Tel:

0536-7572710

电邮/ E-mail:

orlon@orlon.cn

可获取更多信息的部门/ Further information obtainable from:

潍坊奥龙锌业有限公司质量部

QC department of Weifang Orlon Zinc Industry Co., Ltd.

1.4 应急电话/ Emergency Tel

0536-7572713

2. 危险性概述/ Hazards identification

2.1 物质或者混合物危险性类别/ Classification of the substance or mixture

根据《化学品分类和标签规范系列标准 (GB30000.2-29)》进行分类。

Classification according to 《Standard Series for classification and labelling of chemicals (GB30000.2-29)》.

水生急性/ Aquatic Acute:

类别 1, 对水生生物毒性极大。

Category1, Very toxic to aquatic life.

水生慢性/Aquatic Chronic :

类别 1, 对水生生物毒性极大并具有长期持续影响。

Category 1, Very toxic to aquatic life with long lasting effects.

2.2 标签要素/Label elements**象形图/Hazard pictograms:****警示词/Warning words:**

警告

Warning

危险性说明/Hazard statements:

对水生生物毒性极大并具有长期持续影响。

Very toxic to aquatic life with long lasting effects.

防范说明/Precautionary statements:**预防措施/Preventive measures:**

避免释放到环境中。

Avoid release to the environment.

事故响应/Incident response:

收集溢出物。

Collect spillage.

安全储存/Safe storage:

存放在通风良好的地方。保持容器密闭。

Store in a well-ventilated place. Keep the container closed.

废弃处置/Waste disposal:

处置内装物/容器按照地方/区域/国家/国际规章

Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 其他危害/Other hazards

PBT(残留性、生物浓缩性、毒性物质)及 vPvB (高残留性、高生物浓缩性物质) 评价结果。

Results of PBT and vPvB assessment.

PBT(残留性、生物浓缩性、毒性物质)/ PBT:

不适用。

Not applicable.

vPvB (高残留性、高生物浓缩性物质) /vPvB::

不适用。

Not applicable.

3.成分组成信息/Composition\information on ingredients

纯净物/Substance ☒ 混合物/Mixture ☐

成分/Composition	分子式/Chemical formula	浓度范围/Concentration Range
氧化锌/Zinc oxide	ZnO	≥99.70%

4. 急救措施/ First aid measures

4.1 应急措施要领/ Description of first aid measures

吸入/ After inhalation:

吸入后会引引起呼吸道刺激（迅速脱离现场，保持呼吸道畅通，严重者就医）。

May cause respiratory tract (Quickly from the scene, keep respiratory tract clear, serious medical treatment.)

皮肤接触/ After skin contact:

可刺激皮肤（用大量的清水冲洗，严重者就医）。

To stimulate the skin (With plenty of water, serious medical treatment.)

眼睛接触/ After eye contact:

可引起刺激，发红和疼痛（提起眼睑，用流动的清水或生理盐水冲洗，严重者就医）。

May cause irritation, conjunctivitis or pain (Lift eyelid, flush with clean Water or physiological, serious medical treatment.)

食入/ After swallowing:

大量食入可引起胃肠道刺激（误服者立即洗胃、催吐，服用硫酸镁及牛奶等，严重者就医）。

May cause stomach irritation When large amount ingestion (Induce vomiting and wash stomach immediately, drink $MgSO_4$ or milk, serious medical treatment.)

4.2 最重要的急慢性症状及其影响/ Most important symptoms and effects, both acute and delayed

无相关详细资料。

No further relevant information available.

4.3 需及时的医疗处理及特别处理的症状/ Indication of any immediate medical attention and special treatment needed

无相关详细资料。

No further relevant information available.

5. 消防措施/ Firefighting measures

5.1 灭火剂/ Extinguishing media

适当的灭火剂/ Suitable extinguishing agents:

本品不燃，根据着火原因选择灭火剂。

This product does not burn, Choose proper extinguishing agent according to the cause of fire.

5.2 物质或混合物所产生的特别危害/ Special hazards arising from the substance or mixture

无相关详细资料。

No further relevant information available.

5.3 对消防员的建议事项/ Advice for firefighters

防护装备/ Protective equipment:

穿上全面保护的衣物，佩戴口腔呼吸保护装置。

Wear fully protective suit. Mouth respiratory protective device.

6. 泄露应急处理/ Accidental release measures

6.1 个人防护措施、防护装备和应急处置程序/ Personal precautions, protective equipment and emergency procedures

远离燃烧的源头。

Keep away from ignition sources.

避免接触眼睛。

Avoid contact with eyes.

避免接触皮肤。

Avoid contact with skin.

避免形成粉尘。

Avoid formation of dust.

确保有足够的通风装置。

Ensure adequate ventilation

使用呼吸保护装置以避免受到烟雾\粉尘\气溶胶的影响。

Use respiratory protective device against the effects of fumes\dust\ aerosol.

6.2 环境保护措施/Environmental precautions

切勿让产品接触到污水系统或任何水源。

Do not allow product to reach sewage system or any water course.

如果渗入了水源或污水系统，请通知有关当局。

Inform respective authorities in case of seepage into water course or sewage system.

切勿让其进入下水道\水面或地下水。

Do not allow to enter sewers\ surface or ground water.

6.3 收容和清除泄漏物的方法及材料/Methods and material for containment and cleaning up

使用机械提起。

Pick up mechanically.

根据本说明书第 13 节弃置受污染物。

Dispose contaminated material as waste according to item 13.

6.4 参照其他部分/Reference to other sections

有关安全处理的资料请参阅第 7 节。

See Section 7 for information on safe handling.

有关个人防护装备的资料请参阅第 8 节。

See Section 8 for information on personal protection equipment.

有关弃置的资料请参阅第 13 节。

See Section 13 for disposal information.

7. 操作处置与储存/Handling and storage

7.1 安全操作处置的预防措施/Precautions for safe handling

彻底除尘。

Thorough dedusting.

保持贮藏器密封。

Keep receptacles tightly sealed.

避免形成粉尘。

Prevent formation of dust.

避免接触眼镜和皮肤。

Avoid contact with eyes and skin.

确保工作间有良好的通风\排气装置。

Ensure good ventilation\exhaustion at the workplace.

一般职业性卫生措施请参阅第 8 部分。

For the general occupational hygienic measures refer to Section 8.

有关火灾及防止爆炸的资料/Information about fire-and explosion protection:

一般的防火措施。

Normal measures for preventive fire protection.

**7.2 安全储存条件, 包括任何不兼容性/ Conditions for safe storage, including any incompatibilities
储存库和容器需要达到的要求/ Requirements to be met by storerooms and receptacles:**

储存在阴凉的位置。

Store in a cool location.

只能储存在原来的贮藏器。

Store only in the original receptacle.

有关储存于共用储存设施的资料/ Information about storage in one common storage facility:

储存的地方必须远离食品。

Store away from foodstuffs.

储存的地方必须远离易燃物质。

Keep away from ignition sources.

避免于水、酸、氯化橡胶、镁、亚麻籽油等禁配物接触。

Avoid contact with water, acid, chlorinated rubber, magnesium, linseed oil, etc..

有关储存条件的更多资料/ Further information about storage conditions:

将容器密封。

Keep container tightly sealed.

储存密封的贮藏器内, 并放在阴凉、干爽的位置。

Store in cool, dry conditions in well sealed receptacles.

7.3 特定最终用途/ Specific end use

无相关详细资料。

No further relevant information available.

8. 接触控制及个体防护/ Exposure controls and personal protection**8.1 控制参数/ Control parameters****职业接触限值/ Occupational exposure limits**

成分/Ingredients	参数/Parameter		
1314-13-2 氧化锌/ Zinc oxide (≥99.70%)	中国/China	德国/Germany	美国/America
	MAC: 5mg/m ³	PC-TWA: 1A mg/m ³	TLV-TWA: 5mg/m ³

衍生无影响浓度值/ DNELs:

无相关详细资料。

Data not available.

预估无显著影响浓度值/ PNECs:

无相关详细资料。

Data not available.

额外的资料/ Additional information:

制作期间有效的清单将作为基础来使用。

The lists valid during the making were used as basis.

8.2 接触控制/ Exposure controls

根据第 3 节所列的成分信息, 建议在职业接触控制方面采用以下安全措施。

Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.

适当的技术控制/Appropriate engineering controls:

在休息之前和工作完毕后请清洗双手。

Wash hands before breaks and at the end of work.

有关技术设施设计的资料请参阅第七节。

See Section 7 for information about design of technical facilities.

个人防护设备/Personal protective equipment:**呼吸系统防护/Respiratory protection:**

呼吸时可能接触其粉尘时，建议佩戴自吸过滤式防尘口罩。

When breathing may contact the dust, recommends wearing self-priming filter type dust mask.

手部防护/Protection of hands:**保护手套/Protective gloves**

套的物料必须时不渗透性的，且能抵抗该产品/物质/添加剂。

The glove material has to be impermeable and resistant to the product/the substance/the preparation.

基于缺乏测试，对于产品/制剂/化学混合物，并不会提供手套材料的建议。

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

选择手套材料时，请注意材料的渗透时间，渗透率和降解参数。

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

手套材料/Material of gloves:

选择合适的手套不单取决于材料，亦取决于质量特征，以及来自那一间生产厂家。

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

渗入手套材料的时间/ Penetration time of glove material:

请向劳保手套生产厂家获取准确的破裂时间并观察实际的破裂时间。

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

眼睛防护/Eye protection:

建议佩戴合适的安全防护眼镜。

An appropriate protective eyeglass is recommended.

环境接触控制/Environmental exposure controls:

控制措施必须符合环境保护法规。

Control measures must be made in accordance with Community environmental protection legislation.

9. 理化特性/Physical and chemical properties**9.1 有关基本物理及化学特性的信息/Information on basic physical and chemical properties****形态/Form:**

粉末

Powder

颜色/Colour:

白色

White

气味/Odour:

无气味

Odorless

PH 值/PH-value:

7.0-8.0

熔点\凝固点 (分解) /Melting point\freezing point (Decomposition):

1975°C

沸点/Boiling Point:

2360°C

闪点/Flash point:

1436°C

相对密度 (水=1) /Relative density (Water=1):

5.606

溶解性/Solubility in:

水在 30°C: 0.16 (mg/100ml)

Water at 30°C: 0.16(mg/100ml)

易燃性/Flammability:

不易燃

Not Flammable

自燃性/Self-igniting:

不自燃

Not selfigniting

爆炸的危险性/Explosive properties:

不爆炸

Not explosive

9.2 其他信息/Other information

无相关详细资料。

No further relevant information available.

10. 稳定性和反应活性/Stability and reactivity

10.1 稳定性/Chemical stability

在推荐的贮存条件下是稳定的。

Stable under recommended storage conditions.

10.2 反应性/Reactivity

与镁、亚麻子油发生剧烈反应。

与氯化橡胶的混合物加热至 215°C 以上可能发生爆炸。

Reacts violently with magnesium and linseed oil.

The mixture with chlorinated rubber may explode when heated above 215 °C.

10.3 应避免的条件/Conditions to avoid

避免与水、算、氯化橡胶、镁、亚麻籽油等禁配物接触。

Avoid contact with water,acid,chlorinated rubber,magnesium,linseed oil,etc..

10.4 不相容的物质/Incompatible materials

强氧化剂。

Strong oxidizer.

10.5 危险的分解产物/Hazar dous decomposition products

受高热分解, 放出有毒的烟气。

High heat decomposes, giving off poisonous fumes.

11. 毒理学信息/Toxicological information**11.1 毒性学影响的信息/Information on toxicological effects****急性毒性/Acute toxicity:**

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

与分类相关的 LD/LC50 值/ LD/LC50 values relevant for classification

1314-13-2 氧化锌/Zinc oxide

口腔/Oral

LD50

>5,000mg/kg(rat)

皮肤腐蚀\刺激/Skin corrosion\irritation:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

严重眼睛损伤\眼睛刺激性/Serious eye damage\irritation:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

呼吸或皮肤过敏/Respiratory or skin sensitization:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

生殖细胞突变性/Germ cell mutagenicity:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

致癌性/Carcinogenicity:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

生殖毒性/Reproductive toxicity:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

特异性靶器官系统毒性一次性接触/STOT-single exposure:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

特异性靶器官系统毒性反复接触/STOT-repeated exposure:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

吸入危害/Aspiration hazard:

根据现有数据, 产品不被分类。

Based on available data, the classification criteria are not met.

12. 生态学信息/Ecological information

12.1 生态毒性/ Toxicity

无相关详细资料。

No further relevant information available.

12.2 持久性和降解性/ Persistence and degradability

无相关详细资料。

No further relevant information available.

12.3 潜在的生物累积性/ Bioaccumulative potential

无相关详细资料。

No further relevant information available.

12.4 土壤内移动性/ Mobility in soil

无相关详细资料。

No further relevant information available.

12.5 PBT 及 vPvB 评价结果/ Results of PBT and vPvB assessment

PBT: 不适用。

PBT: Not applicable.

vPvB: 不适用。

vPvB: Not applicable.

12.6 其它副作用/ Other adverse effects

无相关详细资料。

No further relevant information available.

12.7 额外的生态学资料/ Additional ecological information

对水有危害。

Hazardous for water.

不要让该产品接触地下水、水道或污水系统。

Do not allow product to reach ground water, water course or sewage system.

即使是小量的产品渗入地下也会对饮用水造成危险。

Danger to drinking water if even small quantities leak into the ground.

对水体中的鱼和浮游生物也有毒害。

Also poisonous for fish and plankton in water bodies.

对水中的有机物有剧毒。

Very toxic for aquatic organisms.

13. 废弃处置/ Disposal considerations**13.1 废弃处理方法/ Waste treatment methods****建议/ Recommendation:**

不能将该产品和家居垃圾一起丢弃，不要让该产品接触污水系统。

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

受污染的容器和包装/ Uncleaned packaging:

必须根据官方的规章来丢弃。

Disposal must be made according to official regulations.

14. 运输信息/ Transport information**14.1 国际危险货物编号/ UN-No.**

ADR\RID\AND,IMDG,IATA:

UN3077

14.2 国际适当的货运名称/UN proper shipping name

ADR\RID\AND,IATA:

环境有害固态物质, 未另作规定的 (氧化锌)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID,N.O.S.(zinc oxide)

IMDG:

危害环境的固态物质, 未另作规定的 (氧化锌), 海洋污染物

ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID,N.O.S.(zinc oxide),MARINE POLLUTANT

14.3 运输危险等级/Transport hazard class(es)

ADR\RID\AND,IMDG,IATA:

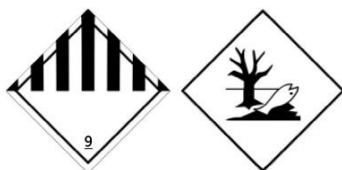
级别/Class:

9 类杂项危险物质和物品

Miscellaneous dangerous substances and articles.

标签/Label:

9



14.4 包装类别/Packing group

ADR\RID\ADN,IMDG,IATA:

III

14.5 环境危害/Environmental hazards

海运污染物质/Marine pollutant:

象征符号 (鱼和树)

Symbol(fish and tree)

ADR\RID\ADN 特别标识/Special marking(ADR\RID\ADN):

象征符号 (鱼和树)

Symbol(fish and tree)

IATA 特别标识/Special marking (IATA):

象征符号 (鱼和树)

Symbol(fish and tree)

14.6 用户特别预防措施/Special precautions for user

警告/Warning:

杂项危险物质和物品

Miscellaneous dangerous substances and articles.

危险识别码 (凯姆勒编码) /Hazard identification No. (Kemler code):

90

EMS 号码/EMS No.:

F-A, S-F

装载类别/Stowage category:

A

14.7 依据《马尔波尔公约》附件二和《国际散货公约》规则进行的散装运输/Transport in bulk according to Annex II of Marpol and the IBC Code

不适用。

Not applicable.

14.8 运输\附加资料/Transport\Additional information:**ADR\RID\AND****有限数量/Limited quantities(LQ):**

5Kg

例外数量/Excepted quantities(EQ):

代码: E1

每个内包装最大净量: 30 克

每个外包装最大净量: 1000 克

Code:E1

Maximum net quantity per inner packaging:30g

Maximum net quantity per outer packaging:1000g

运输类别/Transport category:

3

隧道限制编码 Tunnel restriction code:

不适用。

Not applicable.

IMDG**有限数量/Limited quantities(LQ):**

5Kg

例外数量/Excepted quantities(EQ):

代码: E1

每个内包装最大净量: 30 克

每个外包装最大净量: 1000 克

Code:E1

Maximum net quantity per inner packaging:30g

Maximum net quantity per outer packaging:1000g

UN“标准规定”/UN“Model Regulation”:

UN 3077 危害环境的固态物质, 未另作规定的 (氧化锌), 9, III

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID.N.O.S.(ZINC OXIDE),9,III

15. 法规信息/Regulatory information**15.1 相关物质或者混合物的安全、职业健康及环境法规\条例/Safety,health and environmental regulations\legislation specific for the substance or mixture****德国 MAK/German Maximum Workplace Concentration:**

该物质未被列入。

Substance is not listed

欧盟指令 2012\18\EU-附录 1, 危险物质/EU directive 2012\18\EU-ANNEX I, Dangerous substances:

该物质未被列入。

Substance is not listed.

欧盟法规(EU)2019\1148 附录 1/REGULATION(EU)2019\1148,Annex I:

该物质未被列入。

Substance is not listed.

欧盟法规(EU)2019\1148 附录 2/REGULATION(EU)2019\1148,Annex II:

该物质未被列入。

Substance is not listed.

REACH 法规附录 14 高关注物质名录 (19/1/2021)/VHC Candidate List of REACH Regulation Annex XIV Authorisation(19/1/2021):

该物质未被列入。

Substance is not listed.

REACH 法规附录 14 授权物质名录(6/2/2020)/ REACH Regulation Annex XIV Authorisation List(6/2/2020):

该物质未被列入。

Substance is not listed.

REACH 法规附录 17 限制物质 (25/1/2021) /REACH Regulation Annex XVII(25/1/2021):

该物质未被列入。

Substance is not listed.

国家的法规/National regulations:**《中国现有化学物质名录(2013年版)》/IECSC(2013):**

该物质被列入。

Substance is listed.

《危险化学品目录(2022调整版)》/《Catalogue of Dangerous Chemicals(2022 Modified version)》:

该物质未被列入。

Substance is not listed.

《危险货物品名表》(GB 12268-2012)/《List of dangerous goods》(GB 12268-2012):

该物质未被列入。

Substance is not listed.

《危险货物分类和品名编号》(GB6944-2012)/《Classification and code of dangerous goods》(GB6944-2012):

物质未被列入。

Substance is not listed.

《中国严格限制进出口的有毒化学品目录》(2020) /《List of toxic chemicals whose import and export are severely restricted in China》(2020):

该物质未被列入。

Substance is not listed.

15.2 化学物质安全性评价/ Chemical safety assessment:

尚未进行化学物质安全性评价。

A Chemical Safety Assessment has not been carried out.

16. 其他信息/Other information**编写部门/ Writing Department:**

潍坊奥龙锌业有限公司

Weifang Orlon Zinc Industry Co.,Ltd.

编写说明/ Write instructions:

本化学品安全技术说明书内容和格式的编辑根据,是《化学品安全技术说明书编写指南》(GB/T17519-2013)和《化学品安全技术说明书内容和项目顺序》(GB/T16483-2008),相关数据参考“欧洲化学品管理局(ECHA)数据库”和“中国科学院上海有机化学研究所 化学专业数据库”。

The editorial basis of the content and format of this SDS, is the 《Guidance on the compilation of safety data for chemical products》(GB/T17519-2013) and the 《Safety data sheet for chemical products-Content and order of sections》(GB/T16483-2008). References are made to the “ECHA” database and the “Shanghai Institute of Organic Chemistry” chemical specialty database.

缩写/Abbreviations and acronyms:

ADR:Accord relative au transport international des marchandises dangereuses par route(European Agreement Concerning the international Carriage of Dangerous Goods by Road)

IMDG:International Maritime Code for Dangerous Goods

IATA:International Air Transport Association

GHS:Globally Harmonised System of Classification and Labelling of Chemicals

EINECS:European Inventory of Existing Commercial Chemical Substances

ELNECS:European List of Notified Chemical Substances

CAS:Chemical Abstracts Service (division of the American Chemical Society)

DNEL:Derived No-Effect Level(REACH)

PNEC:Predicted No-Effect Concentration(REACH)

LC50:Lethal concentration,50 percent

LD50:Lethal dose,50 percent

PBT:Persistent,Bioaccumulative and Toxic

VPVB:Very Persistent and very Bioaccumulative

IECSC: Inventory of Existing Chemical Substances in China

Aquatic Acute 1:Hazardous to the aquatic environment-acute aquatic hazard-Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment-long-term aquatic hazard-Category1

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