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第 1 页 共 12 页

化学品安全说明书

(MSDS)

本报告依据的样品成分由申请者提供并确认

THIS MSDS IS AUTHORIZING BASED ON THE DATA SUPPLIED BY

AND IDENTIFIED ON BEHALF OF THE CLIENT.

样品名称: 碳化钙

SAMPLE NAME: Calcium carbide

委托单位: 内蒙古隆威化工科技有限责任公司

CLIENT NAME: Inner Mongolia Longwei Chmeical Technology Co.,LTD

委托单位地址: 内蒙古自治区鄂尔多斯市准格尔开发区纬四路南、 硝铵环
形路东

CLIENT ADDRESS: Inner Mongolia Autonomous Region, Ordos City, Junge
Development Zone, Wei fourth Road south, nitrate ring Road east

MSDS 编号: MSDS NO.: ZX250509-C240601

签发日期: 2025 年 05 月 10 日

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安全技术说明书

Material Safety Data Sheet

说明书目录

| | | | |
|-----------|--|------------|--|
| 第一部分 | 化学品名称及企业标识 | 第九部分 | 理化特性 |
| Section 1 | Identification | Section 9 | Physical and chemical properties |
| 第二部分 | 危险性概述 | 第十部分 | 稳定性和反应性 |
| Section 2 | Hazard identification | Section 10 | Stability and reactivity |
| 第三部分 | 成分/组成信息 | 第十一部分 | 毒理学资料 |
| Section 3 | Composition/information on ingredients | Section 11 | Toxicological information |
| 第四部分 | 急救措施 | 第十二部分 | 生态学资料 |
| Section 4 | First-aid Measures | Section 12 | Ecological information |
| 第五部分 | 消防措施 | 第十三部分 | 废弃处置 |
| Section 5 | Fire-fighting measures | Section 13 | Disposal considerations |
| 第六部分 | 泄漏应急处理 | 第十四部分 | 运输信息 |
| Section 6 | Accidental release measures | Section 14 | Transport information |
| 第七部分 | 操作处置与储存 | 第十五部分 | 法规信息 |
| Section 7 | Handling and storage | Section 15 | Regulatory information |
| 第八部分 | 接触控制/个体防护 | 第十六部分 | 其他信息 |
| Section 8 | Exposure controls/personal protection | Section 16 | Other information |

化学品及企业标识

SECTION 1: Identification

产品名称: 碳化钙
Product name: Calcium carbide
委托方: 内蒙古隆威化工科技有限责任公司
Client: Inner Mongolia Longwei Chemical Technology Co., LTD
技术说明书编码: ZX250509-C240601
MSDS NO.:
委托单位地址: 内蒙古自治区鄂尔多斯市准格尔开发区纬四路南、 硝铵环形路东
Client address: Inner Mongolia Autonomous Region, Ordos City, Junge Development Zone, Wei fourth Road south, nitrate ring Road east
电话: 13847979941
TEL:
应急电话: 18648039999
Emergency TEL:
邮箱: 116079154@qq.com
E-mail:



邮编:

010499

Post code:

危险性概述

SECTION 2: Hazards identification

物质分类: 遇水放出易燃气体的物质和混合物 类别 1

Classification of the substance or mixture: Substances and mixtures that release flammable gases when in contact with water
Class 1

标签要素:

Label elements:



健康危害: 损害皮肤, 引起皮肤瘙痒、炎症、“鸟眼”样溃疡、黑皮病。皮肤灼伤表现为创面长期不愈及慢性溃疡型。接触工人出现汗少、牙釉质损害、龋齿发病率增高。

Health hazards: Damaging the skin, causing itching, inflammation, "bird's eye" ulcers, and melanosis. Skin burns are characterized by long-term non healing of the wound and chronic ulcer type. The exposed workers showed less sweating, enamel damage and increased incidence rate of dental caries.

燃爆危险: 正常环境情况下无燃爆危险, 遇湿易燃。

Fire and explosion danger: Under normal environmental conditions, there is no risk of combustion or explosion, and it is flammable when wet.

环境危害: 随意丢弃本产品会造成环境危害。

Environmental hazards: Throw away at will cause environmental pollution.

成分/组成信息

SECTION 3: Composition/information on ingredients

√物质 Pure chemicals 混合物 Mixture

| 成分信息 Component | 含量 (%) Content | CAS NO. |
|-------------------------------------|-------------------|------------|
| 碳化钙 Calcium carbide | 85 | 75-20-7 |
| 钙 Calcium | 5 | 7440-70-2 |
| 碳 Carbon | 5 | 90597-58-3 |
| 杂质(游离碳) Impurities (free carbon) | 5 | / |

急救措施

SECTION 4: First aid measures

皮肤接触: 脱去污染的衣着, 用肥皂水和清水彻底冲洗皮肤。

Skin contact: Remove contaminated clothes and rinse the skin thoroughly with soapy water and



clean water.

眼睛接触: 立即提起眼睑, 用大量流动清水或生理盐水彻底冲洗至少 15 分钟。如有不适, 就医。

Eye contact: Immediately lift the eyelid and rinse thoroughly with running water for 15 minutes. If necessary, seek medical advice.

吸入: 脱离现场至空气新鲜处。保持呼吸道通畅。如呼吸困难, 给输氧。如呼吸停止, 立即进行

Inhaled: 人工呼吸。就医。

Under normal environmental conditions, there is no risk of combustion or explosion, and it is flammable when wet. Leave the scene and go to a place with fresh air. Keep the respiratory tract unobstructed. If breathing is difficult, administer oxygen. If breathing stops, immediately perform artificial respiration. Seek medical attention.

食入: 饮足量温水, 催吐。就医。

Swallowed: Drink plenty of warm water and induce vomiting. Seek medical attention.

消防措施

SECTION 5: Firefighting measures

危险特性: 干燥时不燃, 遇水或湿气能迅速产生高度易燃的乙炔气体, 在空气中达到一定的浓度时, 可发生爆炸性灾害。与酸类物质能发生剧烈反应。

Hazard characteristics:

When dry, it does not ignite. When it comes into contact with water or moisture, it can quickly produce highly flammable acetylene gas. When it reaches a certain concentration in the air, it can cause explosive disasters. Can undergo violent reactions with acidic substances.

有害燃烧产物:

Harmful combustion products:

乙炔、一氧化碳、二氧化碳。

Acetylene, carbon monoxide, carbon dioxide.

灭火方法:

Fire extinguishing method:

禁止用水和泡沫灭火。二氧化碳也无效。须用干燥石墨粉或其它干粉灭火。

It is forbidden to use water and foam to extinguish the fire. Carbon dioxide is also ineffective. Dry graphite powder or other dry powder must be used to extinguish the fire.

消防注意事项及防护措施:

Precautions and protective measures for fire fighting:

消防人员须佩戴防毒面具、穿全身消防服, 在上风向灭火。

Fire fighters shall wear gas masks and full-body fire suits to extinguish fires in the upwind direction.

如必要的话, 戴自给式呼吸器救火。

If necessary, use self-contained breathing apparatus to fight the fire.

尽可能将产品从火场移至空旷处。

If possible, move the product from the fire to an open area.

隔离事故现场, 禁止无关人员进入。收容和处理消防水, 防止污染环境。

Isolate the accident site and prohibit irrelevant personnel from entering. Contain and treat fire water to prevent environmental pollution.

泄露应急处理

SECTION 6: Accidental release measures



应急处理: 尽可能切断泄漏源。远离热源/火花/明火/热表面。

Emergency handling: Cut off the source as much as possible. Keep from heat/spark/open flame/hot surface.
尽可能将泄漏物收集在可密闭的容器中。

According to the influence of liquid flow, steam or dust diffusion, delimit the warning zone.

隔离泄漏污染区, 限制出入。

Isolate the contaminated area and restrict access.

如果包装破损有固体漏出, 要立即处理, 清扫干净, 倾倒入规定的地点。

If the packaging is damaged and solid leakage occurs, it should be dealt with immediately, cleaned up, and dumped in the designated location.

请及时清扫和收拾装袋, 操作时请穿戴防尘口罩, 佩戴手套和防护眼镜。

Please clean and pack the bags in time, please wear dust mask, gloves and protective glasses when operating.

大量泄漏: 用塑料布、帆布覆盖, 减少飞散, 然后收集回收或运至废物处理场所处置。

Large amount of leakage: cover with plastic cloth and canvas to reduce flying, and then collect, recycle or transport to the waste disposal site for disposal.

小量泄漏: 用砂土、干燥石灰或苏打灰混合。使用无火花工具收集于干燥、洁净、有盖的容器中, 转移至安全场所。

Minor leakage: Mix sand, dry lime, or soda ash. Collect using spark free tools in a dry, clean, covered container and transfer to a safe location.

与人相关的安全防护措施: 建议应急处理人员戴携气式呼吸器, 穿防护服, 戴橡胶手套。

It is recommended that emergency personnel wear breathing apparatus, protective clothing and rubber gloves.

Human related safety protection measures: 禁止接触或跨越泄漏物。

It is forbidden to contact or cross the leakage.

尽可能切断泄漏源。

Cut off the leakage source as far as possible.

无关人员从侧风、上风向撤离至安全区。

Unrelated persons from the side of the wind, upwind evacuation to a safe area.

环境保护措施: 收集泄漏物, 避免污染环境。

Environmental precautions: Collecting leaks to avoid environmental pollution.

无相关政府许可, 不允许将该物质随意释放到环境中。

Disposing this product into the environment without permission of the local government is prohibited.

操作处置与储存

SECTION 7: Handling and storage

安全操作的注意事项: 操作人员必须经过专门培训, 严格遵守操作规程。

Precautions for safe handling: Operators must be professionally trained and must strictly follow operating instructions.



操作处置应在具备局部通风或全面通风换气设施的场所进行。

The operation and disposal shall be carried out in the place with local ventilation or comprehensive ventilation and ventilation facilities.

个体防护措施参见第 8 部分。

See section 8 for individual protective measures.

远离火种、热源，工作场所严禁吸烟。

Keep away from fire and heat sources. Smoking is strictly prohibited in the workplace.

避免与氧化剂、其他消毒类产品或药品等禁配物接触（禁配物参见第 10 部分）。

Separate from oxidants chemicals; disinfectants or drugs. Mixed storage is not allowed (see Section 10 for incompatible materials).

搬运时要轻装轻卸，防止包装及容器损坏。

Handle with care to preempt package or container breakage.

使用后洗手，禁止在工作场所进食。

Wash hands after use and prohibit the intake of food in the workplace.

配备相应品种和数量的消防器材及泄漏应急处理设备。

Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emergency treatment equipment.

安全储藏条件:

Conditions for safe
storage:

储存在场地平整、阴凉、通风、干燥的仓库内。保持容器密封。

Store in a flat, cool, ventilated and dry warehouse. Keep the container sealed.

包装件应堆放整齐。远离火种、热源。

The packaging should be stacked neatly. Keep away from fire and heat.

相对湿度保持在 75 % 以下。包装必须密封，切勿受潮。

Maintain relative humidity below 75%. The packaging must be sealed to prevent moisture.

应与氧化剂、食用化学品分开存放。

Separate from oxidants chemicals.

应与酸类、醇类等分开存放，切忌混储（禁配物参见第 10 部分）。

It should be stored separately from acids, alcohols, etc., and avoid mixing storage (see Part 10 for prohibited substances).

储区应备有泄漏应急处理设备和合适的收容材料。

The storage area should be equipped with emergency leakage treatment equipment and appropriate shelter materials.

接触控制和个体防护

SECTION 8: Exposure controls/personal protection

工程控制:

作业场所建议与其它作业场所分开。

Appropriate engineering
controls:

Workplace recommendations are separate from other workplaces.

加强通风。作业场所应保持良好的职业卫生环境，提供安全操作条件。

Enhanced ventilation. The workplace shall maintain a good occupational health



environment and provide safe operating conditions.

设置红色区域警示线、警示标识和中文警示说明, 并设置通讯报警系统。

Set up red area warning line, warning sign and Chinese warning description, set up communication alarm system.

排风系统应设有导除静电的接地装置。禁止使用易产生火花的设备和工具。

The air conditioning system shall pair with a grounding device. Use non-sparking equipment and tools.

设置应急撤离通道和必要的泄险区。提供安全淋浴和洗眼设备。

Emergency evacuation passage and necessary evacuation area shall be set up. Provide safe shower and eye washing equipment.

呼吸系统防护:

空气中浓度超标时, 佩戴自吸过滤式防尘口罩。

Respiratory protection:

When the air concentration exceeds the standard, wear a self-priming filter dust mask.

眼睛防护:

建议戴化学安全防护眼镜。

Eye protection:



Suggest wearing chemical safety goggles.

手防护:

建议戴防护手套

Hand protection:



Suggest wearing protective gloves.

身体防护:

建议穿工作服。

Body protection:

Suggest wearing work clothes.

其他防护:

工作现场禁止吸烟、进食和饮水。工作完毕, 彻底清洗。

Other protection:

Smoking, eating and drinking are prohibited at work. After work, clean it thoroughly.

理化特性

SECTION 9: Physical and chemical properties

外观与性状:

Appearance and character:

灰色块状固体

Grey blocky solid

气味: 稍有气味

Smell: Slightly odorous

酸碱值:

无

易燃性: 不燃

pH: None

Flammability: Non-Combustible

蒸气密度(空气以 1 计):

无

分解温度(°C): 1700

Vapor density (air in 1): None

Decomposition temperature (°C):

闪点(°C): 无

熔点/凝固点(°C): 2300

Flash point (°C): None

Melting point/freezing point:

相对密度(水以 1 计):

2.22

沸点、初沸点和沸程(°C):

Relative density (water

is calculated as 1):

Boiling point, initial boiling point,

and boiling range (°C):

溶解性:

碳化钙几乎不溶于醇类和大多数有机溶剂, 但能与水发生剧烈反应, 生成乙炔和氢氧化钙

Solubleness:

Calcium carbide is almost insoluble in alcohols and most organic solvents, but can react violently with water to produce acetylene and calcium hydroxide



产品用途: 生产乙炔气, 炼钢脱硫。

Product use: Production of acetylene gas, steelmaking desulfurization.

稳定性和反应活性

SECTION 10: Stability and reactivity

化学稳定性: 正常环境温度下储存和使用, 本品稳定。

Chemical stability: Storage and use at normal ambient temperature, this product is stable.

禁配物: 水、醇类、酸类

Prohibited substances: Water, alcohols, acids

应避免的条件: 潮湿空气

Conditions to avoid: Moist air

聚合危害: 无资料

Polymerization harm: No data available

分解产物: 自然分解, 产物未知。

Decomposition products: Naturally decomposed, product unknown.

毒理学资料

SECTION 11: Toxicological information

急性毒性: 无资料

Acute toxicity: No data available

刺激性: 无资料

Irritation: No data available

致敏性: 无资料

Sensitization: No data available

致突变性: 无资料

Mutagenicity: No data available

致畸性: 无资料

Teratogenicity: No data available

致癌性: 无资料

Carcinogenicity: No data available

生态学资料

SECTION 12: Ecological information

生态毒理毒性: 鱼类急性毒性试验: 无资料

Ecological Toxicity: Acute toxicity test of fish: No data available.

藻类急性活动抑制试验: 无资料

Daphnia acute activity inhibition test: No data available.

藻类生长抑制试验: 无资料

Algae Growth Inhibition Test: No data available.

对微生物的毒性: 无资料

Toxicity to microorganisms: No data available.



生物降解性: 无资料
Biodegradability: No data available
非生物降解性: 无资料
Non-biodegradable: No data available
生物富集或生物积累性: 无资料
Bioaccumulation or bioaccumulation: No data available
其他不良影响: 无资料
Other adverse effects: No data available

废弃处置意见

SECTION 13: Disposal considerations

废弃化学品: 应避免或尽可能的减少废物的产生。由持牌的废物处置承办商进行处理。
Waste chemicals: Waste generation should be avoided or minimized. Handled by a licensed waste disposal contractor.
污染包装物: 将容器返还生产商或按照国家和地方法规处置。
Contaminated packaging: Return containers to the manufacturer or dispose the container in accordance with national and local regulations.
废弃注意事项: 废弃处置前应参阅国家和地方有关法规。处置人员的安全防范措施参见第 8 部分。
Precautions for abandonment: Dispose according to national and local regulations. See section 8 for personal security precautions during waste disposal.

运输信息

SECTION 14: Transport information

联合国危险货物编号: 无资料
UN number: No data available
HS 编码: 2849100000
HS code: 2849100000
包装方法: 按照生产商推荐的方法进行包装
Packing method: Pack as instructed by the manufacturer
运输注意事项: 在运输过程中应防漏、防破损。
Matters of attention to transportation: Leakage and breakage shall be prevented during transportation.
运输车辆应配备相应品种和数量的消防器材及泄漏应急处理设备。
Transport vehicles should be equipped with enough amount of proper fire-fighting equipment and equipment for emergency leakage control.
装运该物品的车辆排气管必须配备阻火装置。
Use non-sparking mechanical equipment and tools to handle this product.
禁止使用易产生火花的机械设备和工具装卸。
It is better to transport in the morning and evening in summer.
夏季最好早晚运输。
Prevent overexposure to sunlight, rain and high temperature during transport.



运输途中应防暴晒、雨淋，防高温。

The exhaust pipe of the vehicle carrying the goods must be equipped with fire retardant.

中途停留时应远离火种、热源、高温区。

Keep from fire, heat and high temperature areas during stopovers.

严禁与酸类、醇类等混装混运。

It is strictly prohibited to mix and transport with acids, alcohols, etc.

运输工具上应根据相关运输要求张贴危险标志、公告。

Dangerous signs and announcements shall be posted on the means of transport in accordance with the relevant transport requirements.

法规信息

SECTION 15: Regulatory information

法规信息: 本安全技术说明书符合(EC) No. 1907/2006.管理规范

Regulatory information: This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

专门对此物质或混合物的安全，健康和环境的规章 / 法规

Safety, health and environment regulations/legislation which regulates this substance or its mixture.

化学品安全评估

Chemical Safety Assessment

中华人民共和国职业病防治法: 未列入

Control Law of Occupational Diseases of the PRC:Nient comprise

职业病危害因素分类目录: 未列入;

Catalogue of occupational hazards:Nient comprise

危险化学品安全管理条例: 未列入

Regulations on the safety management of hazardous chemicals:Nient comprise

危险品化学品目录: 未列入

Hazardous Chemicals Catalog:Nient comprise

易制爆危险化学品名录: 未列入

List of explosive chemicals:Nient comprise

重点监管的危险化学品名录: 未列入

List of Hazardous Chemicals subject to Regulation:Nient comprise

麻醉药品和精神药品管理条例: 未列入

Catalogue of varieties of narcotic drugs:Nient comprise

麻醉药品品种目录: 未列入

Catalogue of psychotropic drugs:Nient comprise

新化学物质环境管理办法: 未列入

Environmental management measures for new chemicals:Nient comprise

中国严格限制进出口的有毒化学品名录: 未列入



List of toxic chemicals strictly restricted for import and export in China: Nient
comprise

其他信息

SECTION 16: Other information

编写和修订信息: 本版为第 1.0 版, 按照 GB/T 16483-2008、GB/T 17519-2013、GB 30000 系列分类标准编制。

Abbreviations and

acronyms:

This is version 1.0 in compliance with GB/T 16483-2008, GB/T 17519-2013 and GB 30000 classification standards.

缩略语和首字母缩写:

Abbreviations and

acronyms:

CAS: CAS 登录号

CAS: CAS login number

MAC: 最高容许浓度(maximum allowable concentration), 指工作地点、在一个工作日内、任何时间有毒化学物质均不应超过的浓度。

MAC: maximum allowable concentration refers to the concentration where toxic chemicals should not exceed during any time during a working day.

PC-TWA: 时间加权平均容许浓度(permissible concentration-time weighted average), 指以时间为权数规定的 8 h 工作日、40 h 工作周的平均容许接触浓度。

PC-TWA: Time weighted average concentration (permissible concentration - time weighted average), refers to the time for weight regulation, 40 h week 8 h working day average permissible exposure concentration.

PC-STEEL: 短时间接触容许浓度(permissible concentration-short term exposure limit), 指在遵守 PC-TWA 前提下允许短时间(15 min)接触的浓度。

PC-STEEL: Short time contact allowable concentration (permissible concentration-short term exposure limit), refers to under the premise that comply with the PC-TWA allows the concentration of short contact time (15 min).

参考文献:

References:

【1】国际化学品安全规划署: 国际化学品安全卡 (ICSC)

网址: <http://www.ilo.org/dyn/icsc/showcard.home>

International Programme on Chemical Safety: International Chemical Safety Card (ICSC) Website: <http://www.ilo.org/dyn/icsc/showcard.home>

【2】国际癌症研究机构, 网址: <http://www.iarc.fr/>

International Agency for Research on Cancer Website: <http://www.iarc.fr/>

【3】OECD 全球化学品信息平台, 网址:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
The OECD Global portal to Information on Chemical Substances

Website: http://www.echemportal.org/echemportal/index?PageID=0&request_locale=en

【4】美国 CAMEO 化学物质数据库, 网址:

<http://cameochemicals.noaa.gov/search/simple>

The CAMEO Chemicals Database,

Website: <http://cameochemicals.noaa.gov/search/simple>



【5】美国医学图书馆:化学品标识数据库

网址: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

United States National Library of Medicine: Chemical Database

Website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

【6】美国环境保护署: 综合危险性信息系统, 网址: <http://cfpub.epa.gov/iris/>

United States Environmental Protection Agency:

Integrated Risk Information System (epa) : integrated risk information system,

Website: <http://cfpub.epa.gov/iris/>

【7】美国交通部: 应急响应指南, 网址: <http://www.phmsa.dot.gov/hazmat/library/erg>

U.S. Department of Transportation: Emergency Response Guidelines,

Website: <http://www.phmsa.dot.gov/hazmat/library/erg>

【8】德国 GESTIS-有害物质数据库, 网址: <http://gestis-en.itrust.de/>

GESTIS – Databases on Hazardous Substances ,Website: <http://gestis-en.itrust.de/>

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