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分析 · 研发 · 检测

MSDS NO.: ZX240913-C290101

编制日期: 2024 年 09 月 13 日

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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: 二氧化氯消毒剂

SAMPLE NAME: Chlorine dioxide disinfectant

委托单位: 山东华实药业有限公司

CLIENT NAME: Shandong Huashi Pharmaceutical Co., Ltd.

委托单位地址: 山东省临朐县中小企业创业产业园

CLIENT ADDRESS: Shandong Linqu County Small and Medium sized
Enterprise Entrepreneurship Industrial Park

MSDS 编号: MSDS NO.: ZX240913-C290101

签发日期: 2024 年 09 月 13 日

ISSUE DATE: SEP.13,2024



NAME :Beijing ZKGX Research Institute of Science and Technology Tel: 400-635-0567 Website: <http://www.bjfxcs.cn> Complaints Hotline:010-82491398

Statement: This test result is only responsible for the samples submitted for inspection; Comments are for reference only; This test report shall not be partially copied.

Please scan the national report to check the authenticity of the anti-fake code. If you have any questions about the test results, please call for advice.



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安全技术说明书

Material Safety Data Sheet

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化学品及企业标识

SECTION 1: Identification

产品名称:	二氧化氯消毒剂
Product name:	Chlorine Dioxide Disinfectant
委托方:	山东华实药业有限公司
Client:	Shandong Huashi Pharmaceutical Co., Ltd.
技术说明书编码:	ZX240913-C290101
MSDS NO.:	
委托单位地址:	山东省临朐县中小企业创业产业园
Client address:	Shandong Linqu County Small and Medium sized Enterprise Entrepreneurship Industrial Park
电话:	15315313089
TEL:	

危险性概述

SECTION 2: Hazards identification

物质分类:	GHS 分类: 氧化性固体类别 2
Classification of the	GHS classification: Oxidative solid category 2

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substance or mixture: 急性毒性(口服)类别 4
Acute toxicity (oral) category 4
急性毒性(皮肤)类别 4
Acute toxicity (skin) category 4
急性毒性(吸入)类别 4
Acute toxicity (inhalation) category 4
皮肤腐蚀/刺激类别 2
Skin corrosion/irritation category 2
严重眼损伤/眼刺激类别 1
Serious eye injury/eye irritation category 1
生殖毒性类别 1
Reproductive toxicity category 1
特定目标器官毒性-单次接触类别 3(呼吸道刺激)
Specific target organ toxicity - single exposure category 3 (respiratory irritation)
特定目标器官毒性——重复接触类别 2(经口, 血液与造血系统)
Specific target organ toxicity - repeated exposure category 2 (oral, blood and hematopoietic system)
危害水生环境(急性)类别 2
Hazardous to aquatic environment (acute) category 2
危害水生环境(慢性)类别 2
Hazardous to aquatic environment (chronic) category 2.

标签要素:

Label elements:



健康危害:

Health hazards:

本品对眼睛、皮肤、粘膜和上呼吸道具强烈刺激作用和腐蚀性。

This product has a strong irritant and corrosive effect on the eyes, skin, mucous membranes, and upper respiratory tract.

燃爆危险:

Fire and explosion danger:

正常环境情况下无燃爆危险, 高浓度可燃。

Under normal environmental conditions, there is no risk of combustion or explosion, and high concentrations are flammable.

环境危害:

Environmental hazards:

随意丢弃本产品会造成环境危害。

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.

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氯化钠	10	7647-14-5
sodium chloride		
硫酸氢钠	40	7681-38-1
Sodium bisulfate		
亚氯酸钠	10	7758-19-2
Sodium chlorite		
无水硫酸钠	40	15124-09-1
Anhydrous sodium sulfate		

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:	迅速脱离现场至空气新鲜处。保持呼吸道通畅, 就医。
Inhaled:	Quick release from site to fresh air. Keep the airways open. Refer for medical attention.
食入:	漱口, 禁止催吐, 就医。
Swallowed:	Rinse the mouth, no vomiting, and seek medical advice.

消防措施

SECTION 5: Firefighting measures

危险特性:	本品对眼睛、皮肤、粘膜和上呼吸道具强烈刺激作用和腐蚀性。
Hazard characteristics:	This product has a strong irritant and corrosive effect on the eyes, skin, mucous membranes, and upper respiratory tract.
有害燃烧产物:	无资料
Harmful combustion products:	No data available
灭火方法:	用水雾、干粉、泡沫或二氧化碳灭火剂灭火。
Fire extinguishing method:	Fire with water mist, dry powder, foam or carbon dioxide extinguishing agent.
消防注意事项及防护措施:	消防人员须佩戴防毒面具、穿全身消防服, 在上风向灭火。
Precautions and protective measures for fire fighting:	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。 尽可能将产品从火场移至空旷处。 If necessary, use self-contained breathing apparatus to fight the fire. 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。

Collect the leakage in a closed container as much as possible.

根据粉尘扩散的影响区域划定警戒区。

Designate a warning zone based on the impact area of dust dispersion.

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 there is any solid leakage from packaging damage, it should be disposed of immediately, cleaned up and dumped in the specified place.

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.

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.

根据粉尘扩散的影响区域划定警戒区。

Designate a warning zone based on the impact area of dust dispersion.

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, 不允许把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.

如需罐装，应控制流速，且有接地装置，防止静电积聚。

If you need to be canned, you should control the flow rate and have a grounding device to prevent the accumulation of static electricity.

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:

储存在场地平整、阴凉、通风、干燥的仓库内。保持容器密封。

Conditions for safe storage:

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.

应与氧化剂、食用化学品分开存放。

Separate from oxidants chemicals.

切忌混储（禁配物参见第 10 部分）。

Mixed storage is not allowed (see section 10 for incompatible materials).

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:

戴化学安全防护眼镜。

Eye protection:



Wear chemical safety protection for eyes. Wear chemical safety protection for eyes.

手防护:

戴橡胶耐油手套。

Hand protection:



Wear rubber oil-resistant gloves.

身体防护:

穿戴防护服。

Body protection:

Wear protective clothing.

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:

固体

Solid

气味:

无味

Smell:

Odorless

溶解性:

溶于水

Solubleness:

Dissolve in water

易燃性:

高浓度可燃

Flammability:

High concentration combustible

产品用途:

Product use:

消毒剂

Disinfectant

酸碱度: 无资料

pH: No data available

密度 (g/cm³): 无资料

Density (g/cm³): No data available

熔点/凝固点(°C): 无资料

Melting point / freezing point (°C): No data available

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: 强氧化剂、强酸、强碱

Prohibited substances: Strong oxide, strong acid, strong base.

应避免的条件: 高热、明火、潮湿

Conditions to avoid: High heat, open flame, moist

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.

鱼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:	1479
UN number:	
HS 编码:	3808940090
HS code:	
联合国运输名称:	氧化性固体, 为另作规定的
UN Shipping Name:	Oxidized solid, as otherwise specified
建议包装类别:	II
Suggested packaging category:	
危险货物类别:	
Dangerous goods category:	5.1
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。禁止使用易产生火花的机械设备和工具装卸。

夏季最好早晚运输。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. Use non-sparking mechanical equipment and tools to handle this product.

It is better to transport in the morning and evening in summer. Prevent overexposure to sunlight, rain and high temperature during transport.

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.

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:

CAS: CAS 登录号

Abbreviations and
acronyms:

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-STEL: 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-STEL: 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:

【1】国际化学品安全规划署: 国际化学品安全卡 (ICSC)

References:

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

Website: http://www.chemportal.org/chemportal/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>



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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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