

Material Safety Data Sheet

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第一部分 化学品及企业标识

Part I Chemicals and Company Identification

化学品中文名称：钆布醇

Chemical Chinese Name: Gadobutrol

化学品英文名称：Gadobutrol

Chemical English Name: Gadobutrol

化学品俗名或商品名：钆布醇

Chemical Common Name: Gadobutrol

企业中文名称：杭州凯莫思生化有限公司

Company Chinese Name: Kaimosi BioChem Tech Co.,Ltd

企业英文名称：Kaimosi BioChem Tech Co.,Ltd

Company English Name: Kaimosi BioChem Tech Co.,Ltd

联系电话 **Contact Number:** +(86) 571 8719 1913

传真 **Fax:** +(86) 571 8756 2572

推荐用途和限制用途: 用于对比增强磁共振成像的造影剂。

Recommended and Restricted Use: Contrast media for contrast-enhanced magnetic resonance imaging

第二部分 危险性概述

Part II Hazardous Overview

紧急情况概述 Emergency Overview:

白色或者类白色粉末。如果吸入,请将患者移到新鲜空气处。如呼吸停止,进行人工呼吸。

用肥皂和大量的水冲洗。谨慎起见用水冲洗眼睛。切勿给失去知觉者喂食任何东西。用水漱口。

White or off-white powder. If inhaled, move the patient to fresh air. If breathing stops, artificial respiration is given. Rinse with soap and plenty of water. Caution to rinse eyes with water. Never feed anything to an unconscious person. Rinse mouth with water.

GHS 危险性类别 GHS Hazard Class:

无资料 No Information

GHS 标签要素，包括防范措施说明

GHS labeling elements, including instructions for precautionary measures

无资料 No Information

危害性说明：目前掌握资料，没有健康和环境危害

Hazard Statement: According to the information currently available, there are no health and environmental hazards.

防范说明（预防措施）Precautionary Statement (Prevention Measures):

无 N/A

防范说明（事故响应）Precautionary Statement (Incident Response):

无 N/A

防范说明（安全储存）Precautionary Statement (Secure Storage):

无资料 No Information

防范说明（废弃处置）Precautionary Statement (Waste Disposal):

无资料 No Information

健康危害 Health Hazard:

无资料 No Information

第三部分 成分/组成信息

Part III Ingredient /Composition Information

化学品性质 Chemical Properties:

单一物质 Single Substance

成分 Ingredient:

(化学名) 危险成分 (Chemical Name) Hazardous Ingredients	CAS No.	浓度或浓度范围% Concentration or Concentration Range
钆布醇Gadobutrol	138071-82-6	100%

第四部分 急救措施

Part IV First Aid Measures

一般建议 General Recommendations:

如症状持续，呼叫医生。

If symptoms persist, call the doctor

吸入 Inhale:

如果吸入，请将患者移到新鲜空气处。

If inhaled, move the patient to fresh air

皮肤接触 Skin Exposure:

脱去污染的衣着，用肥皂水和清水彻底冲洗皮肤。如有不适感，就医。

Remove contaminated clothing and rinse skin thoroughly with soapy water and water. If you feel unwell, seek medical attention

眼睛接触 Eye Exposure:

分开眼睑，用流动清水或生理盐水冲洗。立即就医。

Separate the eyelids and rinse with running water or saline. Seek immediate medical attention

食入 Ingestion:

漱口，禁止催吐。立即就医

Gargle, do not induce vomiting. Seek immediate medical attention

对保护施救者的忠告 Advice to Protect Rescuers:

将患者转移到安全的场所。咨询医生。出示此化学品安全技术说明书给到现场的医生看。

Move patients to a safe place. Consult a doctor. Show this material safety data sheet to the doctor at the scene.

对医生的特别提示 Special Tips for Doctors:

无资料 No Information

第五部分 消防措施

Part V Fire Protection Measures

灭火方法和灭火剂（适合及不适合） **Extinguishing methods and extinguishing agents (suitable and unsuitable):**

合适的灭火剂：用水雾、干粉、泡沫或二氧化碳灭火剂灭火。

Suitable extinguishing agent: extinguish the fire with water mist, dry powder, foam or carbon dioxide extinguishing agent.

特别危险性（如燃烧后有害产物）：

Particularly Dangerous (e.g. harmful products after combustion)

无资料 No Information

灭火注意事项及保护措施 **Precautions and protective measures for fire extinguishing:**

消防人员须佩戴携气式呼吸器，穿全身消防服，在上风向灭火。尽可能将容器从火场移至空旷处。处在火场中的容器若已变色或从安全泄压装置中发出声音，必须马上撤离。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。

Firefighters must wear airborne breathing apparatus and full-body firefighting suits to extinguish fires in the upwind direction. Move the container from the fire to an open place as much as possible. If containers in the fire have changed color or make noise from safety pressure relief devices, firefighters must evacuate immediately. Isolate the scene of the accident and prohibit unrelated personnel from entering. Contain and treat firefighting water to prevent environmental pollution.

第六部分 泄漏应急处理

Part VI Emergency Treatment of Leakage

作业人员（应急与非应急人员）防护措施、防护装备 **Protective measures and protective equipment for operators (emergency and non-emergency personnel):**

建议应急处理人员戴携气式呼吸器，穿防静电服，戴橡胶耐油手套。

It is recommended that emergency personnel wear air-carrying breathing apparatus, anti-static clothing, and rubber oil-resistant gloves.

应急处理程序 **Emergency Treatment Procedures:**

禁止接触或跨越泄漏物。作业时使用的所有设备应接地。尽可能切断泄漏源。消除所有点火源。根据液体流动、蒸汽或粉尘扩散的影响区域划定警戒区，无关人员从侧风、上风

向撤离至安全区。

It is forbidden to touch or cross the leakage. All equipment used during the operation should be grounded. Cut off the source of the leak as much as possible. Eliminate all ignition sources. Alert areas are designated according to the affected areas of liquid flow, steam or dust dispersion, and unrelated personnel are evacuated to safety areas from crosswinds and up winds.

环境保护措施 Environmental Protection Measures:

收容泄漏物，避免污染环境。防止泄漏物进入下水道、地表水和地下水。

Contain leakage and avoid polluting the environment. Prevent leakage from entering sewers, surface water, and groundwater.

泄漏化学品的收容、清除方法及所使用的处置材料（小量泄漏、大量泄漏）：

Containment and removal methods of spilled chemicals and disposal materials used (small leakages, large leakages):

小量泄漏：尽可能收集在可密闭的容器中。禁止冲入下水道。

Small leakages: Collect in a tightly sealable container whenever possible. It is forbidden to flush into the sewer

大量泄漏：构筑围堤或挖坑收容。封闭排水管道。

Large Leakages: building embankments or digging pits to contain them. Close drainage pipes.

防止发生次生危害的预防措施 Preventive Measures to Prevent Secondary Hazards:

无 N/A

第七部分 操作处置与储存

Part VII Handling and Storage

安全操作注意事项（技术、通风、接触） Safe Operation Precautions (Technical, Ventilation, Exposure):

操作人员应经过专门培训，严格遵守操作规程。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。避免眼和皮肤的接触。个体防护措施参见第 8 部分。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。避免与氧化剂等禁配物接触（禁配物参见第 10 部分）。搬运时要轻装轻卸，防止包装及容器损坏。倒空的容器可能残留有害物。使用后洗手，禁止在工作场所进饮食。配备相应品种和数量的消防器材及泄漏应急处理设备。 Operators should be specially trained and strictly abide by operating procedures. Handling should be carried out in a place with local ventilation or full ventilation facilities. Avoid eye and skin exposure. Personal protective measures are described in Part 8. Keep away from fire and heat

sources, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. Avoid exposure with forbidden mixtures such as oxidants (see Part 10 for forbidden mixtures). When handling, it should be loaded and unloaded lightly to prevent damage to packaging and containers. Empty containers may leave harmful residues. Wash hands after use, and do not eat or drink in the workplace. Equipped with corresponding varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

安全储存主要事项（技术、禁忌、包装）Key Matters for Safe Storage (Technology, Taboos, Packaging):

储存于阴凉、通风的库房。库温不宜超过 37℃。应与氧化剂、食用化学品分开存放，切忌混储（禁配物参见第 10 部分）。保持容器密封。远离火种、热源。库房必须安装避雷设备。排风系统应设有导除静电的接地装置。采用防爆型照明、通风设置。禁止使用易产生火花的设备和工具。储区应备有泄漏应急处理设备和合适的收容材料。

Store in a cool, ventilated warehouse. The storage temperature should not exceed 37℃. It should be stored separately from oxidants and edible chemicals, and should not be mixed (see Section 10 for forbidden compounds). Keep the container sealed. Keep away from fire and heat. Lightning protection equipment must be installed in the warehouse. The exhaust system should be equipped with a grounding device to remove static electricity. Explosion-proof lighting and ventilation Settings are adopted. Do not use equipment and tools that may cause sparks. The storage area should be equipped with leak emergency treatment equipment and suitable containment materials.

第八部分 接触控制和个体防护

Part VIII Exposure Control and Personal Protection

职业接触限值 Occupational Exposure Limit:

组分 Component	CAS RN	MAC (最高容许浓度 Maximum Allowable Concentration)	PC-TWA (时间加权平均容许浓度 Permissible Concentration-Time Weighted Average)	PC-STEL (短时间接触容许浓度 Permissible Concentration-Short Term Exposure Limit)	基准 Standard
钆布醇 Gadobutrol	138071-82-6	无资料 No Information	无资料 No Information	无资料 No Information	无资料 No Information

生物限值 Biological Limit

组分 Component	CAS RN	生物监测指 标 Biological Monitoring Index	生物限值 Biological Limit	采样时间 Sampling Time	基准 Standard
钆布醇 Gadobutrol	138071-82-6	无资料 No Information	无资料 No Information	无资料 No Information	无资料 No Information

监测方法 Monitoring Method:

GBZ/T 160.1 ~ GBZ/T 160.81-2004 工作场所空气有毒物质测定（系列标准）, EN 14042 工作场所空气用于评估暴露于化学或生物试剂的程序指南

GBZ/T 160.1 ~ GBZ/T 160.0.1-2004 Determination of toxic substances in workplace air (Series of standards), EN 14042 Guidance on procedures for assessing exposure to chemical or biological agents in workplace air

工程控制方法 Engineering Control Method:

作业场所建议与其它作业场所分开。 密闭操作，防止泄漏。 加强通风。 设置自动报警装置和事故通风设施。 设置应急撤离通道和必要的泻险区。 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。 提供安全淋浴和洗眼设备。

Workspaces are recommended to be separated from other workspaces. Closed operation to prevent leakage. Enhance ventilation. Set up automatic alarm device and emergency ventilation facilities. Set up emergency evacuation channels and necessary danger reducing areas. Set up red area warning line, warning mark and Chinese warning description, and set up communication alarm system. Provide safety shower and eye washing facilities

个体防护设备 Personal Protective Equipment:

当处理化学品时，应遵循一般的预防措施。远离食品、饮料和饲料。立即除去所有被污染或浸渍的衣服。请在休息时和工作完毕后洗手。避免和眼睛及皮肤接触。维持符合人体工程学的工作环境。

General precautions should be followed when handling chemicals. Stay away from food, drink and feed. Remove all contaminated or soaked clothing immediately. Wash your hands during

breaks and after work. Avoid contact with eyes and skin. Maintain an ergonomic working environment.

呼吸系统防护 Respiratory System Protection:

空气中浓度超标时，佩戴过滤式防毒面具（半面罩）。紧急事态抢救或撤离时，应该佩戴携气式呼吸器。

When the concentration in the air exceeds the standard, wear a filter gas mask (half mask). In case of emergency rescue or evacuation, should wear an air breathing apparatus.

手部防护 Hand Protection:

戴橡胶耐油手套 Wear rubber oil-resistant gloves

眼睛/面部防护 Eye/face Protection:

戴化学安全防护眼镜 Wear chemical safety glasses

皮肤和身体防护 Skin and Body Protection:

穿防毒物渗透工作服 Wear an antiseptic penetration suit.

其他防护 Other Protection:

无 N/A

第九部分 理化特性

Part IX: Physical and Chemical Characteristics

外观与性状 (物态、形状和颜色) Appearance and Characteristics (State of matter, Shape and Color):

物态：粉末

State of Matter: Powder

颜色：白色

Color: White

气味 Odor:

无气味 No Odor

气味阈值 Odor Threshold:

无数据资料 No data

pH 值 (浓度) pH value (Concentration):

无数据资料 No data

熔点/凝固点 Melting/Freezing Point (°C) :

无数据资料 No data

沸点、初沸点和沸程 Boiling Point, Initial Boiling Point and Boiling Range (°C) :

无数据资料 No data

闪点 Flash Point (°C) :

无数据资料 No data

蒸发速率 Evaporation Rate:

无数据资料 No data

易燃性 (固体、气体) Flammability (Solid, Gas):

无数据资料 No data

爆炸极限 (上、下限) Explosive Limit (Upper and Lower Limits):

无数据资料 No data

蒸气压 Vapor Pressure:

无数据资料 No data

蒸气密度 Vapor Density:

无数据资料 No data

密度/相对密度 (水为 1) Density/Relative Density (1 for water):

无数据资料 No data

溶解性 Solubility:

无数据资料 No data

n-辛醇/水分配系数 N-octanol/water partition coefficient:

无数据资料 No data

临界温度 Critical Temperature (°C) :

无数据资料 No data

临界压力 Critical Pressure (MPa) :

无数据资料 No data

自燃温度 Autoignition Temperature (°C) :

无数据资料 No data

分解温度 Decomposition Temperature (°C) :

无数据资料 No data

燃烧热 Heat of Combustion (KJ/mol) :

无数据资料 No data

粘度 Viscosity:

无数据资料 No data

第十部分 稳定性和反应性

Part X Stability and Reactivity

反应性 Reactivity:

无数据资料 No data

化学稳定性 Chemical Stability:

正常环境温度下储存和使用，本品稳定。

The product is stable when stored and used at normal environment and temperature.

危险反应可能性 Risk Reaction Possibility:

无数据资料 No data

应避免的条件 Conditions to be Avoided:

静电放电、热、潮湿等。

Electrostatic discharge, heat, humidity, etc.

禁忌物质 Contraindication Substance:

强氧化剂，强酸、强碱

Strong oxidant agent, strong acid, strong base

危险的分解产物 Dangerous Decomposition Products:

无数据资料 No data

第十一部分 毒理学信息

Part XI Toxicological Information

急性毒性 Acute Toxicity:

无数据资料 No data

皮肤刺激或腐蚀 Skin Irritation or Corrosion:

无数据资料 No data

眼睛刺激或腐蚀 Eye Irritation or Corrosion:

无数据资料 No data

呼吸或皮肤过敏 Respiratory or Skin Allergies:

无数据资料 No data

生殖细胞突变性 Germ Cell Mutagenicity:

无数据资料 No data

致癌性 Carcinogenicity:

本品没有已知的致癌化学物质

This product has no known carcinogenic chemicals

生殖毒性 Reproduction Toxicity:

无数据资料 No data

特异性靶器官系统毒性 Specific Target Organ System Toxicity（一次性接触 One-time Exposure）：

无数据资料 No data

特异性靶器官系统毒性 Specific Target Organ System Toxicity（反复接触 Repeated Exposure）：

无数据资料 No data

吸入危害 Inhalation Hazard:

无数据资料 No data

潜在的健康危害 Potential Health Hazard（吸入、食入、皮肤接触、眼睛接触 Inhalation, Ingestion, Skin Exposure, Eye Exposure）：

无数据资料 No data

第十二部分 生态学信息

Part XII Ecological Information

生态毒性（鱼类、其它）Ecotoxicity (Fish, Others):

对鱼类的毒性 Toxicity to Fish:

无数据资料 No data

对水蚤和其他水生无脊椎动物的毒性 Toxicity to daphnia and other aquatic invertebrates:

无数据资料 No data

对藻类的毒性 Toxicity to algae:

无数据资料 No data

持久性和降解性 Durability and Degradability:

无数据资料 No data

潜在的生物累计性 Potential Bioaccumulation:

无数据资料 No data

土壤中的迁移性 Mobility in Soils:

无数据资料 No data

其他不利的影响 Other Adverse Effects:

无数据资料 No data

第十三部分 废弃处置

Part XIII Waste Disposal

废弃化学品 Waste Chemical:

尽可能回收利用。如果不能回收利用，采用焚烧方法进行处置。不得采用排放到下水道的方
式废 弃处置本品。

Recycle whenever possible. If it cannot be recycled, incineration is used for disposal. This product
shall not be disposed of by means of drainage

污染包装物 Contaminated Packaging:

将容器返还生产商或按照国家和地方法规处置。

Return the container to the manufacturer or dispose in accordance with national and local
regulations.

废弃注意事项 Disposal Considerations:

废弃处置前应参阅国家和地方有关法规。National and local regulations should be consulted
before disposal.

处置人员的安全防范措施参见第 8 部分。

See part 8 for safety precautions for disposal personnel

第十四部分 运输信息

Part XIV Transport Information

联合国危险货物编号 UN Dangerous Goods Number (UN 号 UN number) :

无资料 No Information

联合国运输名称 United Nations Transport Designation:

无资料 No Information

联合国危险性分类 United Nations Risk Classification:

无资料 No Information

包装类别 Categories of Packing:

无资料 No Information

海洋污染物（是/否） Marine Pollutant (Yes/No):

否 No

包装标志 Packing Mark:

无数据资料 No data

包装方法 Packing Method:

按照生产商推荐的方法进行包装。

Pack as recommended by the manufacturer

运输注意事项 Transportation Precautions:

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。严禁与氧化剂、食用化学品等混装混运。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。中途停留时应远离火种、热源、高温区。公路运输时要按规定路线行驶，勿在居民区和人口稠密区停留。铁路运输时要禁止溜放。严禁用木船、水泥船散装运输。运输工具上应根据相关运输要求张贴危险标志、公告。

Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and leakage emergency treatment equipment. It is strictly prohibited to mix with oxidants and edible chemicals. The exhaust pipe of the vehicle carrying the article must be equipped with a fire retarder.. It is prohibited to use mechanical equipment and tools that are prone to spark for loading and unloading. In summer, it is best to transport it in the morning and at night. During transportation, it should be protected from sun exposure, rain, and high temperature. Stay away from fire, heat source and high temperature area during stopover. Road transport should follow the prescribed route, do not stay in residential areas and densely populated areas. It is forbidden to hump in railway transportation. It is strictly prohibited to use wooden or cement ships for bulk transport. Danger signs and announcements shall be posted on the means of transport in accordance with relevant transport requirements.

第十五部分 法规信息

Part XV Regulatory Information

法规信息: Regulatory information

《全球化学品统一分类和标签制度-修改第四版 ST/SG/AC.10/30/Rev.4》

Globally Harmonized System of Classification and Labeling of Chemicals - Rev. 4

《化学品安全技术说明书编写指南》 GBT17519

Guidelines for the Preparation of Material Safety Data Sheet

《化学品安全技术说明书 内容和项目顺序》 GBT 16483

Material Safety Data Sheets Content and Item Sequence

《危险化学品安全管理条例》（2013 年国务院 645 号令）；

Regulations on the Safety Administration of Dangerous Chemical

《工作场所安全使用化学品规定》（[1996]劳部发 423 号）等法规；

Regulations for the Safe Use of Chemicals in the Workplace (Labor Dept. [1996] No. 423)

《化学品分类、警示标签和警示性说明安全规范》（GB20576-2006~20599-2006、GB20601-2006、GB20602-2006）；

Safety Rules for Classification, Precautionary Labeling, and Precautionary Statements of Chemicals

《常用危险化学品分类及标志》（GB13690）；

Classification and Labeling of Commonly Used Hazardous Chemicals

《危险货物名称表》（GB12268）；

List of Dangerous Goods

《危险化学品名录》（2015 年版）；

List of Hazardous Chemicals (2015 edition)

《危险货物分类和品名编号》（GB6944）；

Dangerous Goods Classification and Article Number

《化学品分类和危险性公示通则》(GB13690)

General Rule for Classification and Hazard Communication of Chemicals

《常用化学危险品贮存通则》(GB15603)

General Rules for the Storage of Commonly Used Hazardous Chemical

《公共场所有害因素职业接触限值 第一部分：化学有害因素》（GBZ2.1-2019）；

Occupational Exposure Limit for Hazardous Agents in the Workplace Part I: Chemical Harmful Factors

《工业场所有害因素职业接触限值 第二部分：物理因素》(GBZ2.2-2019)

Occupational Exposure Limit for Hazardous Agents in the Workplace Part II: Physical Factors

所有用户必须启用和遵照在本化学品安全说明书（SDS）以及国家安全生产监督管理总局（SAWS）、中华人民共和国环境保护部（MEP）、卫生部（MOH）、人力资源和社会保障部（MHR&SS）等部门发布的法规中指定的作业人员保护措施以及环境排放控制方法。

All users must use and comply with the operator protection measures and environmental emission controls specified in SDS and regulations issued by the State Administration of Work Safety (SAWS), the Ministry of Environmental Protection (MEP), the Ministry of Health (MOH), the Ministry of Human Resources and Social Security (MHR&SS) and other departments Method.

针对该产品的 HSE 管理规定：HSE management regulations for this product:

《中华人民共和国职业病防治法》（2018 年第 24 号主席令）；

Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases

《劳动防护用品选用规则》（GB11651）；

Rules for Selection of Labor Protection Articles

《职业病危害因素分类目录》（国卫疾控发[2015]92 号）；

Classification of Occupational Hazards (National Health Disease Control [2015] No. 92)

本品未列入中国《危险化学品名录》（2015 版）、《危险货物品名表》（GB12268-2005），《高毒物品目录》（2003 版），《易制毒化学品目录》（2021），《中国严格限制进出口有毒化学品目录》，《禁止进口货物目录》。

This product is not listed in China's "List of Hazardous Chemicals" (2015 edition), "List of Dangerous Goods" (GB12268-2005), "List of Highly Toxic Substances" (2003 edition), "Catalogue of Precursor Chemicals" (2021), "Catalogue of Toxic Chemicals Strictly Restricted by China", "List of Prohibited Imported Goods".

第十六部分 其他信息

Section XVI Additional Information

参考文献 Reference:

<https://echa.europa.eu/information-on-chemicals>

修订日期 Revision Date:

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。

This edition is the 1.0th edition, prepared in accordance with GB/T 16483-2008, GB/T 17519-2013, GB 30000 series classification standards

修订说明 Revision Instructions:

本说明书用于一般的工业用途，所提供信息是为了确保产品得到合适的使用、处置，不是制造商的保证书。目前，它是根据可靠的参考数据和测试数据制成的。为需要者提供参考，请根据各自职责与实际情况依据此资料制定合适的应对措施。

This manual is intended for general industrial use. The information provided is intended to ensure proper use and disposal of the product and is not a guarantee of the manufacturer. At present, it is based on reliable reference data and test data. For the reference of those who need it, please formulate appropriate countermeasures according to their respective responsibilities and actual situations.

本文件记载了产品的安全信息。关于质量保证上的必要条件请参照技术资料、规格说明书等。

This document records the safety information of the product. For the necessary conditions of quality assurance, please refer to the technical data, specifications, etc.

如需更多信息，请与杭州凯莫思生化有限公司（Kaimosi BioChem Tech Co.,Ltd）联系。

For more information, please contact Kaimosi BioChem Tech Co.,Ltd

缩略语说明 Abbreviations Statement:

GHS：全球化学品统一分类和标签制度。

Globally Harmonized System of Classification and Labeling of Chemicals

CAS No.：化学物质登录号

Chemical Abstracts Service Number

MAC：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。

It refers to the concentration of toxic chemicals that should not be exceeded in the workplace at any time during a working day

PC-TWA：指以时间为权数规定 8h 工作日、40h 工作周的平均容许接触浓度。

It refers to the average permissible exposure concentration of 8h working days and 40h working weeks with time as the weight.

PC-STEL：指在遵守 PC-TWA 前提允许短时间（15min）接触的浓度。

It refers to the concentration at which a short period (15min) of exposure is permitted, subject to compliance with PC-TWA.

ACGIH：美国政府工业卫生专家会议

American Conference of Governmental Industrial Hygienists

GBZ/T: 推荐性的国家职业卫生标准代号

Recommended National Occupational Health Standard Code

WS/T: 卫生组织推荐标准

WHO Recommended Standards

PPE: 个人防护用品

PPE: Personal Protective Equipment

UN 号: 是联合国《关于危险货物运输的建议书》对危险货物制订的编号

It is the number of dangerous goods established by the United Nations in the *Recommendations on the Transport of Dangerous Goods*

ICAO: 国际空运危险货物规则

Regulations for the International Carriage of Dangerous Goods by Air

IMDG: 国际海运危险品法规

IMDG: International Maritime Dangerous Goods Regulation

ADR: 关于危险货物道路国际运输的欧洲协议

Autorisation Dangerous Road

RID: 国际铁路运输危险货物规则

The Regulation concerning the International Carriage of Dangerous Goods by Rail

AND: 国际危险货物内河运输欧洲协定

The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

免责声明 Disclaimer:

本 SDS 中全面真实地提供了所有相关资料, 但我们并不能保证其绝对的广泛性和精确性。

本 SDS 仅为受过适当专业训练并使用该产品的有关人员提供对该产品的安全预防资料。获取该 SDS 的作业人员, 在特殊的使用条件下, 必须对本 SDS 的适用性做出独立的判断。在特殊的使用条件下, 对由于使用本 SDS 所导致的伤害, 本企业不负任何责任。

All relevant information is provided in this SDS, but we cannot guarantee the absolute universality and accuracy. This SDS provides safety precautionary information for the product only to those who have received appropriate professional training and used the product. The operator who obtains the SDS must make an independent judgment on the suitability of the SDS under special

conditions of use. Under special conditions of use, the company is not responsible for any injuries caused using this SDS.