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正本/ORIGIN

编号: TCH23015108 No: TCH23015108 日期: 2023-08-03 Date: 2023-08-03

ZAIQ-RF(HH)-01-19

Safety Data Sheet

习描杳看在线报告



Applicant name: Zhejiang Yisheng Fluid Intelligent Control Co., Ltd.

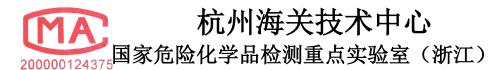
Product Name: Nitrous Oxide Cartridge

Edit date: 2023-08-03

Edit institution: Technology Center of Hangzhou Customs District

Approver: 万时美

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声明

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This report shall be used in integrity. This organization will not be responsible for any misleading caused by the content of this report.

Safety Data Sheet Nitrous Oxide Cartridge	Page 1 of 9 According to GHS rev 9				
1. Identification of substance					
Product Name	Nitrous Oxide Cartridge				
Other Name	Nitrous Oxide				
Chemical Name	None				
Recommended Use	Processing aid				
Manufacturer Name	Zhejiang Yisheng Fluid Intelligent Control Co., Ltd.				
Address	Science and Technology Industrial Estate, Yuhuan City Zhejiang Pro. China / 317605				
Phone Number	+86-0576-87253339				
Fax Number	+86-0576-87253339				
WEB or E-mail	None				
Emergency Phone Number	+86-15108272604 or call your nearest poison control centre.				
Number	2. Hazards identification				
GHS classification	Oxidizing gases 1				
	Gases under pressure (Liquefied gas)				
	Reproductive toxicity 1A				
	Specific target organ toxicity, single exposure 3				
	Specific target organ toxicity, repeated exposure 1				
GHS Pictograms					
Signal words	Danger				
Hazard statements	H270:May cause or intensify fire;oxidizer				
	H280:Contains gas under pressure;may explode if heated				
	H360:May damage fertility or the unborn child				
	H336:May cause drowsiness or dizziness				
	H372:Causes damage to organs through prolonged or repeated exposure				
Precautionary Statement	P203:Obtain, read and follow all safety instructions before use.				
Prevention	P220:Keep away from clothing and other combustible materials.				
P244:Keep valves and fittings free from oil and grease.					
	P260:Do not breathe dust/fume/gas/mist/vapours/spray.				

P264: Wash hands thoroughly after handling. P270:Do not eat, drink or smoke when using this product. P271:Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye

protection/face protection/hearing protection.

Precautionary Statement

P304+P340:IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Response

I .				
P318:IF exposed or concerned: Get medical advice.				
	P319:Get medical help if you feel unwell.			
	P370+P376:In case of fire: Stop leak if safe to do so.			
Precautionary Statement	P403:Store in a well-ventilated place.			
Storage	P403+P233:Store in a well-ventilated place. Keep container			
	tightly closed. P405:Store locked up.			
		rom sunlight. Store in	a well-ventilated	
	place.			
Precautionary Statement	P501:Dispose of contents/container in according with local			
Disposal	regulation.			
Other hazards which do	Not applicable			
not result in classification	-			
3.	Composition/informat	ion on ingredients		
√ Substances				
□Mixtures				
Component Information				
Component	CAS number	EINECS number	Mass(%)	
Nitrous Oxide	10024-97-2	233-032-0	>99%wt	
	4.First-aid me	asures		
NOTE TO PHYSICIAN	Keep victim under ob	servation. Avoid contac	ct with any organic	
	material, including fu	iel, solvents, sawdust,	paper, clothing, or	
	other contraindicated substances, which can cause ignition.			
	other contramateace	u substances, winch c	an cause ignition.	
		of ignition and increase		
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After skin contact After eye contact After ingestion Most important symptoms/effects, acute	Remove all sources of contact with skin a protective equipme symptomatically. Syn Immediately move to needed. If ingest or mouth-to-mouth are Perform CPR immedi ON FROSTBITE: rins clothes. Refer for me First rinse with plens contact lenses if eattention. Do not induce vomit unconscious person physician. May damage fertility May cause drowsines Causes damage to exposure.	of ignition and increase and eyes. Avoid breathing the including breathing properties of the first and keep broadle the first at the first attention. If the including the first attention in the first attention in the first attention in the first attention. It is a solution in the first attention in the first attention. It is a solution in the first attention in the	e ventilation. Avoid thing vapors. Use ng masks. Treat ed. eathing. Oxygen if do not administer breathing stops. Intion immediately. It, do NOT remove of minutes (remove refer for medical ng by mouth to an water. Consult a supple or repeated	

The gas is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen.			
5. Fire-fighting measures			
Suitable extinguishing agents	In case of fire in the surroundings, use appropriate extinguishing media. In case of fire: keep container cool by spraying with water. Combat fire from a sheltered position.		
Special hazards caused by the material, its products of combustion or flue gases	High concentrations of gas can cause asphyxiation without warning. Contact with gas may cause burns, serious injury and/or frostbite. Does not burn, but will intensify the fire. Contact with combustible substances such as wood, paper, oil or metal powder can cause spontaneous combustion or violent decomposition. It has a combustion-supporting effect due to the release of oxygen. Substances contain oxidizing agents/organic peroxides, which can intensify the fire by supplying oxygen and allow the flame to sustain itself.		
Protective equipment for fire-fighters	Extinguishing actions may not be effective against an existing fire. Containers may explode when heated. Wear filter type gas mask (full mask) or isolated respirator, and wear full body fire and gas protective clothing. Put out the fire upwind. Cut off the gas supply. If the gas source cannot be cut off immediately, it is not allowed to extinguish the burning gas. Cool the exposed container with spraying water, move the container from the fire to the open area if possible.		
	6. Accidental release measures		
Person-related safety precautions	Ensure adequate ventilation. Remove all ignition sources. Quickly evacuate personnel to a safe area, away from the spill area and upwind. Use personal protective equipment. Avoid breathing vapours, fumes, gases or dust.		
Measures for environmental protection	Prevent further leakage or spillage if safe to do so. Do not allow material to be released to the environment without proper		
Measures for cleaning/collecting	governmental permits. Ventilation. NEVER direct water jet on liquid. If liquid: do NOT absorb in saw-dust or other combustible components. For a small amount of leakage, dry sand or inert adsorbent material can be used to absorb the leakage, and for a large amount of leakage, embankment should be built to control it. Attachments or collected materials should be stored in suitable closed containers and disposed of in accordance with relevant local laws and regulations. Remove all ignition sources and use spark-proof tools and explosion-proof equipment.		
Additional information	See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.		

7. Handling and storage

Handling

Information for safe handling

Strict airtight, provide sufficient local exhaust and full exhaust. Operators must be specially trained and strictly abide by the operating procedures. It is recommended that operators wear filter gas mask (half mask), chemical protective glasses, gas penetrating protective clothing and chemical gloves. Keep away from fire and heat source. Smoking is forbidden in the workplace. Keep away from flammable and combustible materials. Prevent gas leakage into the workplace air. Handle with care during transportation to prevent container damage. Provide corresponding variety and quantity fire fighting equipment and emergency treatment equipment for leakage. Keep away from fire and heat source. No smoking in the workplace. Use explosion-proof ventilation system and equipment. Prevent gas leakage into the workplace air. Take measures to prevent the build up of electrostatic charge. NO contact with combustible substances.

Information about protection against explosions and fires

STORAGE

Requirements to be met by storerooms and containers

Keep container tightly closed. Store in a dry, cool and ventilated place. Keep away from heat, sparks, open flames and hot surfaces. Store away from incompatible materials and food containers.

Information about storage in one common storage facility

Keep away from fire and heat. Store separately from strong reducing agents, flammable or combustible materials, ether, ethylene, reactive metals, and avoid mixed storage.

Further information about storage conditions

No data available.

8. Exposure controls/personal protection

Limit Values for Exposure

Component Nitrous Oxide

CAS number ACGIH ACGIH NIOSH NIOSH TLV-TWA TLV-STEL PEL-TWA PEL-STEL 10024-97-2 50 ppm N.E. 25 ppm N.E.

Appropriate engineering controls

Maintain adequate ventilation, especially in enclosed areas. Make sure there are eyewash and shower facilities near the workplace. Use explosion-proof electrical appliances, ventilation, lighting and other equipment. Set up emergency exit and necessary risk-elimination area.

General protective and hygienic measures

Wear safety glasses, antistatic work clothes, safety shoes, safety gloves and eye washing facilities.

Smoking, eating and drinking are strictly prohibited at the work site. Keep good hygiene habits. Avoid inhalation of high concentrations. Access to tanks, confined spaces or other high-concentration areas must be supervised.

Personal protective equipment	Wear filter type gas mask, safety glasses, antistatic overalls, safety shoes and safety gloves.
Breathing equipment	In case of the concentration in the air exceeds the standard, use filter gas mask (half mask). Emergency rescue or
	evacuation, it is recommended to wear airborne respirators.
Protection of hands	Wear general work protective gloves.
Eye/Face protection	Generally no special protection is required. Use safety glasses with side shields or safety goggles as mechanical barrier for prolonged exposure.
Body protection	Full set of anti chemical reagent overalls, flame retardant antistatic protective clothing, choose body protection according to the amount and concentration of the dangerous substance at the work place.
Note: 1 N F means not est	ahlished

	babblaned at the morn place.
Note: 1. N.E. means not est	ablished.
	9.Physical and chemical properties
Physical state	Liquid (liquefied gas, liquid at room temperature)
Colour	Colourless
Odour	Sweet
Melting point/freezing point	-90.8 ℃
Boiling point or initial boiling point and boiling range	-88.5 ℃
Flammability	Support combustion. Contact with combustibles is easy to catch fire.
Lower and upper explosion limit/ flammability limit	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pН	No data available
Kinematic viscosity	No data available
Solubility	Soluble in water, ethanol, ether, concentrated sulfuric acid
Partition coefficient: n-octanol/water(log value)	0.35
Vapour pressure	506.62 kPa (-58 ℃)
Density and/or relative density	1.23 (-89 ℃, water=1)
Relative vapour density (air=1)	1.52

Particle characteristics	Not applicable
	10. Stability and reactivity
Reactivity	Contact with incompatible materials such as strong reducing agents, flammable or combustible materials, etc., has the risk of fire and explosion.
Chemical stability	Stable under proper conditions of use and storage.
Possibility of hazardous	The substance is a strong oxidant above 300 $^{\circ}$ C. It reacts
reactions	violently with reducing agents and some combustible substances. This generates fire and explosion hazard. Reacts with reactive metals to be explosive or cause fire.
Conditions to avoid (e.g.	Heat and flame and spark. The extreme temperatures and
static discharge, shock or vibration)	direct sunlight. Static discharge.
Incompatible materials	Avoid contact with strong reducing agent, flammable or
·	combustible materials, ether, ethylene, reactive metals, etc.
Hazardous decomposition	Nitric oxide.
products	
	11.Toxicological information
Routes of Entry: Dermal co	ontact, eye contact, inhalation, ingestion.
Acute Toxicity	LD50 (Oral, rat): N/A
	LC50 (Inhalation, rat): 1068 mg/m³ (4 h)
	LD50 (Dermal, rabbit): N/A
Skin corrosion/Irritation	Not classified
Serious eye	Not classified
damage/irritation	
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility or the unborn child.
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified
Chronic Effects	Not classified
Further Information	Effects of short-term exposure: The liquid may cause frostbite.
	The substance may cause effects on the central nervous
	system. This may result in lowering of consciousness.
	Effects of long-term or repeated exposure: The substance may
	have effects on the bone marrow and nervous system. May
	cause reproductive toxicity in humans.
-	12. Ecological information
Ecotoxicity	Took O Charica
Aquatic Toxicity	Test & Species

96 Hr LC50 fish: N/A

48 Hr EC50 Daphnia: N/A 72 Hr EC50 Algae: N/A

Persistence and

Not available

degradability

Bioaccumulative potential Not available Mobility in soil Not available

Additional Information Hazardous to the environment and special attention should be

paid to the contamination of surface water, soil, atmosphere

and drinking water.

13. Disposal considerations

WASTE DISPOSAL INSTRUCTIONS

Contact a qualified professional waste disposal service to dispose of

this material.

Dispose of in accordance with local environmental regulations or local

authority requirements.

14. Transport information

The Recommendation of Transport of Dangerous Goods(TDG)

UN Number UN 2037

Proper Shipping Name GAS CARTRIDGES without a release device, non-refillable

Class/Division Division 2.2 Non-flammable Non-toxic Gases

Package Group —

Subsidiary risk Division 5.1 Oxidizing Substances

labelling pictogram



Maritime transport IMDG Being same with TDG

See 191, 344 for Special Provisions.

Marine pollutant (Yes/No): No

Air transport ICAO-TI and Being same with TDG

IATA-DGR See A167, A802 for Special Provisions.

15. Regulatory information

European/International Regulations

OSHA: Hazardous by definition of Hazard Communication Standard

(29CFR 1910.1200).

EINECS Status: Nitrous Oxide (CAS 10024-97-2) is included in EINECS

inventory.

EPA TSCA Status: Nitrous Oxide (CAS 10024-97-2) is included in TSCA inventory.

Canadian Nitrous Oxide (CAS 10024-97-2) is included in DSL.

DSL (Domestic Substances List):

HMIS (Hazardous

Health: 3

Material Identification System Ratings):

Flammability: 1 Physical hazard: 1

Personal protection: H

(4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1.

Slight Hazard; 0. Minimal Hazard)

WHMIS(Canadian

Unknown.

Workplace Hazardous Material Identification System Ratings):

dangerous goods

GB 12268-2012 List of This chemical is a dangerous goods on the GB 12268-2012 list

of dangerous goods.

16. other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

This Material Safety Data Sheet was based on the "Globally Harmonized System of Classification and Labelling of Chemicals", "Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations", "INTERNATIONAL MARITIME DANGEROUS GOODS CODE"," International Air Transport Association Dangerous Goods Regulations", the National Standards and other related dangerous chemicals management laws, regulations and standards, which are periodically updated and changed. To make dangerous goods / hazardous chemicals comply with the relevant requirements of the latest management, regularly update is recommended.

This Material Safety Data Sheet has been compiled in both English and Chinese. For any discrepancies, the Chinese version shall prevail.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road

RID: Regulations Concerning the International Transport of

Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA-DGR: Dangerous Goods Regulations by the "International Air

Transport Association" (IATA)

ICAO-TI: Technical Instructions by the "International Civil Aviation

Organization" (ICAO)

EINECS: European Inventory of Existing Commercial Chemical

Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

Safety Data Sheet Page 9 of 9
Nitrous Oxide Cartridge According to GHS rev 9

Edit Date 03.08.2023 Update and Revise Second edition

Edit Standard

Globally Harmonized System of Classification and Labelling of

Chemicals Part 1.5

Revised Institution Technology Center of Hangzhou Customs District



杭州海关技术中心

国家危险化学品检测重点实验室 (浙江)



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编号: TCH23015108 No: TCH23015108 日期: 2023-08-03 Date: 2023-08-03

ZAIQ-RF(HH)-01-19

化学品安全数据表



申请单位: 浙江羿升流体智控有限公司

产品名称:氧化亚氮气弹

编制日期: 2023-08-03

编制机构: 杭州海关技术中心

批准人: 万旺美

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杭州海关技术中心

国家危险化学品检测重点实验室 (浙江)



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1.本报告中检测结果仅对样品负责。

The result in this test report is only valid for the tested samples.

2.本报告无授权人签字、未加盖本机构报告专用章无效。

This report is invalid without authorized signature or the stamp of this organization.

3.对本报告中检测数据如有异议,请在收到报告后十五天内提出复测申请(部分特殊项目不能复

测)。复测以原样为准,复测维持原结论时,由申请方承担复测费。

If there is any dissidence to the test data, the entrusting party shall apply for retesting within 15 days upon receiving this report (Some special item can not be retested). The former tested samples will be used as the retested ones. If the retest results are the same as the former ones, the retest fee will be paid by the entrusting party.

4.本报告各页均为报告不可分割部分,使用者部分使用检测报告而导致误解或由此造成后果,本 机构不承担任何责任。

This report shall be used in integrity. This organization will not be responsible for any misleading caused by the content of this report.

氧化亚氮气弹	依据 GHS 第9修订版编写				
	1. 标识				
产品名称	氧化亚氮气弹				
其他名称	氧化亚氮、笑气				
化学名称	一氧化二氮				
使用建议	加工助剂				
生产商	浙江羿升流体智控有限公司				
地址	浙江省玉环市科技产业功能区(楚门吴家村)/317605				
固定电话	+86-0576-87253339				
传真	+86-0576-87253339				
网址或电子邮件地址	无				
应急电话	+86-15108272604 或向离你最近的解毒中心求助				
	2. 危险标识				
GHS 危险性分类	氧化性气体 1 类				
	加压气体 (液化气体)				
	生殖毒性 1A 类				
	特定目标器官毒性-单次接触 3 类				
	特定目标器官毒性-重复接触 1 类				
GHS 危险标签	A A A A				
信号词	危险				
危险说明	H270:可能导致或加剧燃烧;氧化剂				
	H280:内装加压气体,遇热可爆炸				
	H360:可能对生育能力或胎儿造成伤害				
	H336:可能造成昏睡或晕眩				
	H372:长期或重复接触会对器官造成损害				
防范说明	P203:使用前索取,阅读并遵照所有安全说明书。				
预防	P220:远离离服装和其他可燃材料。				
	P244:减压阀不得带有油脂或油剂				
	P260:不要吸入粉尘/烟/气体/烟雾/蒸汽/喷雾				
	P264:作业后彻底清洗双手				
	P270:使用本产品时,不要进食、饮水或吸烟				
	P271:只能在室外或通风良好处使用				
	P280:戴防护手套/穿防护服/戴防护眼罩/面具/听力保护。				
防范说明	P304+P340:如误吸入:将受害人转移到空气新鲜处,保持呼吸				
反应	舒适				
	P318:如接触到或有疑虑:求医。				
	P319:如感觉不适,需求医。				
	P370+P376:火灾时,如能保证安全,可设法堵塞泄漏				
■ 175- (大大) 14 m目	D.4.0.2 . 去杂子 泽 园 白 42 41				

P403:存放于通风良好处

防范说明

氧化亚氮气弹

贮存 P403+P233:存放于通风良好处并保持容器密闭 P405: 存放处须加锁 P410+P403:防日晒, 存放于通风良好处 P501:依据地方法规处置内装物/容器 防范说明 处置 不导致分类的其他危险 未知 3. 成分构成/成分信息 √物质 □混合物 成分信息 成分 CAS 号 EINECS 号 含量(%) 一氧化二氮 10024-97-2 233-032-0 >99%wt 4. 急救措施 让受害人处于观察监护下。避免接触任何有机物,包括燃料、溶剂、 锯屑、纸张、衣料或其它禁忌物质,这些物质都可以引起点燃。清 对医师的建议 除所有火源,增强通风。避免接触皮肤和眼睛。避免吸入蒸气。使 用防护装备包括呼吸面具。根据出现的症状进行针对性处理。注意 症状可能会出现延迟。 吸入后 立即将患者移到新鲜空气处,保持呼吸畅通。如果呼吸困难,给予 吸氧。如患者食入或吸入本物质,不得进行口对口人工呼吸。如果 呼吸停止。立即进行心肺复苏术。立即就医。 冻伤时:用大量水冲洗,不要脱去衣服。就医。 皮肤接触后 先用大量水冲洗几分钟(如可能易行,取下隐形眼镜),然后就医。 眼睛接触后 禁止催吐。切勿给失去知觉者喂食任何东西。用水漱口。请教医生。 摄入后 主要的症状和影响,包括急 可能对生育能力或胎儿造成伤害。 性和迟发效应 可能造成昏睡或晕眩。 长期或重复接触会对器官造成损害。 吸入: 欣快症。倦睡。头晕。昏迷。 该气体比空气重,可能积聚在低层空间,造成缺氧。 5. 消防措施 周围环境着火时,可使用任何可得到的灭火剂进行灭火。着火时, 合适的灭火剂 喷雾状水保持容器冷却。从掩蔽位置灭火。 高浓度气体可导致没有预兆的窒息。与气体接触可能造成烧伤,严 由物质本身或其燃烧产物、 烟气产生的特殊危险 重伤害和/或冻伤。不燃烧,但会增强火势。与木材、纸张、油类 或金属粉末等可燃物质接触,能引起自燃或剧烈分解。因释放氧气 有助燃效果。物质含有氧化剂/有机过氧化物,可通过供氧使火势 加强并让火焰自身维持。灭火行动对已发生的火灾可能无效。加热 时,容器可能爆炸。 消防人员的特殊防护设备 佩戴过滤式防毒面具(全面罩)或隔离式呼吸器、穿全身防火防毒 服。在上风向灭火。切断气源。若不能立即切断气源,则不允许熄 灭正在燃烧的气体。喷水冷却容器,可能的话将容器从火场移至空 旷处。 6. 泄露应急处理

暴露限值

氧化亚氮气弹	依据 GHS 第9修订版编写
与人相关的安全防范措施	保证充分的通风。清除所有点火源。迅速将人员撤离到安全区域,
	远离泄漏区域并处于上风方向。使用个人防护装备。避免吸入蒸气、
	烟雾、气体或风尘。
环境保护措施	如能做到应防止进一步的泄露和溢出。无相关政府许可,不允许把
	该物质释放到环境中。
清洁/收集措施	通风。切勿直接往液体上喷水。如是液体:不要用锯末或其他可燃
	组分吸收。少量泄漏时,可采用干砂或惰性吸附材料吸收泄漏物,
	大量泄漏时需筑堤控制。附着物或收集物应存放在合适的密闭容器
	中,并根据当地相关法律法规废弃处置。清除所有点火源,并采用
附加说明	防火花工具和防爆设备。 关于安全操作的信息见第 7 部分
例 州 	关于女生操作的信息见弟 7 部分 关于个人防护设备的信息见第 8 部分
	关于处置的信息见第 13 部分
	1. ↑₩ 11 √12 1 1 1¼B
安全操作的信息	严加密闭,提供充分的局部排风和全面排风。操作人员必须经过专
	门培训,严格遵守操作规程。建议操作人员佩戴过滤式防毒面具(半
	面罩),戴化学防护眼镜,穿透气型防毒服,戴化学品手套。远离
	火种、热源。工作场所禁烟。远离易燃、可燃物。防止气体泄漏到
	工作场所空气中。搬运时轻装轻卸,防止容器破损。配备相应品种
	和数量的消防器材及泄漏应急处理设备。
防止爆炸和火灾的信息	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。防止气体泄露到工作场所空气中。采取措施防止静电电荷积累。
	禁止与可燃物质接触。
存储	
对储藏室和容器的要求	保持容器密闭。储存在干燥、阴凉和通风处。远离热源、火花、明
光工,(建造大 並 	火和热表面。存储于远离不相容材料和食品容器的地方。
关于储藏在普通存储设施 中的信息	远离火种、热源。应与强还原剂、易燃或可燃物、乙醚、乙烯、活 泼金属、食用化学品分开存放,切忌混储。
中的信息 关于储藏条件进一步的信	放金禺、食用化字面分开存放,切忌混储。 无数据资料。
大 1 個概条件过一少的信息	儿 纵 加以代。
7 <u>U</u>	8. 暴露控制/人身保护
	○ 『◇★♪♪☆ 1 丁 小 1 / ノ く / 1 / ト 1 / 1

O	見 徳 松田	/ / 白./日 + 台
8.	暴露控制。	/人身保护

		ACGIH	ACGIH	NTOCIL 2m	NITOCII ANI
_h_N	646 H	阈限值-时	阈限值-短		NIOSH闽
成分	CAS 号	间加权平	时间接触	限值-时间加	
		均浓度	限值	权平均浓度	接触限值

一氧化二氮 50 ppm 10024-97-2 N.E. 25 ppm N.E.

保持充分的通风,特别在封闭区内。确保在工作场所附近有洗眼和 减少接触的工程控制方法

淋浴设施。使用防爆电器、通风、照明等设备。设置应急撤离通道

和必要的泄险区。

一般保护和卫生措施 戴安全眼镜,穿防静电工作服、安全鞋、使用安全手套、洗眼设施。

工作现场严禁吸烟、进食和饮水。保持良好的卫生习惯。避免高浓

度吸入。进入罐、限制性空间或其它高浓度区作业,须有人监护。

戴过滤式防毒面具, 戴安全眼镜, 穿防静电工作服、安全鞋, 使用 个人防护用品

安全手套。

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 呼吸设备

救或撤离时,建议佩戴空气呼吸器。

双手保护 戴一般作业防护手套。

眼睛/面部保护 一般不需特殊防护。使用带侧罩或安全眼镜的护目镜作为工人长期

暴露的机械屏蔽。

身体保护 全套防化学试剂工作服, 阳燃防静电防护服, 防护设备的类型必须

根据特定工作场所中的危险物的浓度和含量来选择。

注:1. N.E. - 未建立。

9.物理和化学特性

液体(液化气体,室温下呈液态) 物理状态

颜色 无色 气味 有甜味 熔点/凝固点 -90.8 ℃ 沸点或初始沸点和沸程 -88.5 ℃

易燃性 助燃。与可燃物接触易着火燃烧。

上、下爆炸极限/易燃极限 无数据资料 闪点 不适用 自燃温度 无数据资料 分解温度 无数据资料 无数据资料 pH 值

运动粘度 无数据资料

溶于水、乙醇、乙醚、浓硫酸 溶解性

分配系数:正辛醇/水(对数 0.35

值)

蒸汽压 506.62 kPa (-58 °C) 1.23 (-89 ℃, 水=1) 密度和/或相对密度

相对蒸气密度(空气=1) 1.52 颗粒特征 不适用

10. 稳定性和反应活性

与强还原剂、易燃或可燃物等禁配物接触,有发生火灾和爆炸的危 反应性

险。

化学稳定性 在正确的使用和存储条件下是稳定的。

该物质是一种强氧化剂(300 ℃以上时)。与还原剂和某些可燃 有害反应的可能性

物质发生激烈反应。产生着火和爆炸的危险。与活泼金属反应具有

爆炸性或引起着火。

需避开的条件(如:静电放 热、火焰和火花。极端的温度和阳光直射。静电。

电,震动等)

不相容的物质 避免与强还原剂、易燃或可燃物、乙醚、乙烯、活泼金属等接触。

有害分解产物 氧化氮。

11.毒理学信息

第5页共7页 依据 GHS 第9修订版编写

进入人体内的途径:皮肤接触、眼睛接触、吸入和摄入。

急性毒性 LD50(口服, 大鼠): 未知

LC50(吸入,大鼠): 1068 mg/m³ (4 h)

LD50 (皮肤, 兔子): 未知

皮肤腐蚀/刺激 未分类 严重眼损伤/刺激 未分类 呼吸或皮肤敏化作用 未分类 生殖细胞致突变性 未分类 致癌性 未分类

可能对生育能力或胎儿造成伤害。 生殖毒性

特定目标器官毒性-单次接触 可能造成昏睡或晕眩。

长期或重复接触会对器官造成损害。 特定目标器官毒性-重复接触

吸入危险 未分类 慢性影响 未分类

短期接触的影响: 该液体可能造成冻伤。该物质可能对中枢神 其他信息

经系统造成影响。可能导致意识降低。

长期或反复接触的影响:该物质可能对骨髓和神经系统有影响。

可能造成人类生殖毒性。

12. 生态学信息

生态毒性

水生毒性 测试 & 物种

> 96 Hr LC50 鱼: 未知 48 Hr EC50 潘类: 未知 72 Hr EC50 藻类: 未知

持久性和降解性 未知 潜在的生物累积性 未知 土壤中的迁移性 未知

该物质对环境有危害,应特别注意对地表水、土壤、大气和饮 其他信息

用水的污染。

13. 废弃处置

废物处置说明

联系一家有资质的专业废物处置机构来处置。

按照当地的环境法规或地方当局的要求来进行处置。

14. 运输信息

联合国《关于危险货物运输的建议书规章范本》(TDG)

UN 编号 UN 2037

装气体的小型贮器(蓄气筒),没有释放装置,不能再充气的 正式运输名称

危险类/项别 2.2 项 非易燃无毒气体

包装类别

次要危险性 5.1 项 氧化性物质 危险性标签



国际海运危规 IMDG

特殊规定详见 **191**, **344**。 海洋污染物(是/否): 否

国际空运危规 ICAO-TI 和

与 TDG 的分类相同

IATA-DGR

特殊规定详见 A167, A802。

15. 法规信息

欧洲/国际法规

OSHA (美国职业安全和健康

危险性根据危害通讯标准来编写 (29CFR 1910.1200).

管理法):

EINECS (欧洲现有商业化学

一氧化二氮(CAS 10024-97-2)已被列入 EINECS 目录中。

物质名录):

EPA TSCA(有毒物质控制

一氧化二氮(CAS 10024-97-2)已被列入 TSCA 目录中。

法):

加拿大 DSL(国内物质清单): HMIS(危险品识别系统): 一氧化二氮(CAS 10024-97-2)已被列入 DSL 目录中。

健康危害: 3

易燃性: 1

物理危害: 1 个人防护: H

(4. 极其严重危害; 3. 严重危害; 2. 中度危害; 1. 轻度危

害; 0. 极小危害)

WHMIS(加拿大工作场所有

害物质识别系统):

未知。

GB 12268-2012 危险品清 单 该化学品作为危险品被列入 GB 12268-2012 危险品清单。

16. 其他信息

雇主只能把本化学品安全数据表的信息当作他们所获其他信息的补充信息,并能独立判断此信息的适用性,以确保正确使用并保护雇员的健康和安全。此化学品安全数据表提供的信息并不具担保作用,任何未按本化学品安全数据表使用产品、或与其他产品和操作过程同时使用本产品时产生的后果由用户自行承担。

本化学品安全数据表是根据《全球化学品统一分类和标签制度》,《联合国关于危险货物运输的建议书》,《国际海运危规》,国际航空运输协会《危险货物规则》和国家标准等相关危险化学品管理法律法规和标准进行编制,而上述法律法规和标准均会定期进行更新和变化。为使危险货物/危险化学品符合相关最新的管理要求,建议定期审核更新化学品安全数据表。

本化学品安全数据表分别以中、英文编制,在对中、英文本的理解上发生歧义时,以中文文本为准。

缩略语 ADR:《关于危险货物道路国际运输的欧洲协议》

RID:《关于危险货物铁路国际运输的规则》

氧化亚氮气弹

IMDG: 国际海运危规

IATA-DGR: 国际航空运输协会《危险货物规则》(IATA) ICAO-TI: 国际民用航空组织《国际民航公约》(ICAO)

EINECS: 欧洲现有商业化学物质名录

CAS: 化学文摘号 LC50: 半数致死浓度 LD50: 半数致死剂量 EC50: 半数效应浓度

编制日期 2023.08.03

更新和修改 第 2 版

编制标准 全球化学品统一分类和标签制度 第 1.5 部分

编制机构 杭州海关技术中心