杭州海关技术中心
国家危险化学品检测重点实验室（浙江）
200000124375

电话（Tel）： 0571 8352 7220
传真（Fax）：0571 8352 7219
邮编（Post code）：311215
地址（Add.）：中国杭州市萧山区建设三路 398 号

正本/ORIGIN

编号：TCH24009720
No：TCH24009720
日期：2024-05-08
Date：2024-05-08

ZAIQ-RF(HH)-01-19

Safety Data Sheet

扫描查看在线报告

Applicant name：Zhejiang TitrC Technology Co., Ltd.

Product Name: Precast Reagent R006

Edit date: 2024-05-08

Edit institution: Technology Center of Hangzhou Customs District

Approver：

1. Unless other wise stated, this test report is only responsible for the sample(s).
2. This test report can not be reproduced,except in full,without prior written permission of the lab.

杭州海关技术中心

国家危险化学品检测重点实验室（浙江）

200000124375

电话（Tel）： 0571 8352 7220
传真（Fax）：0571 8352 7219
邮编（Post code）：311215
地址（Add.）：中国杭州市萧山区建设三路 398 号

正本/ORIGIN

编号：TCH24009720
No：TCH24009720
日期：2024-05-08
Date：2024-05-08

声　明

DECLARATION

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.

1. Identification of substance	
Product Name	Precast Reagent R006
Other Name	Chemical Oxygen Demand Precast Reagent
Chemical Name	None
Recommended Use	Laboratory use. Water quality analysis and determination.
Producer Name	Zhejiang TitrC Technology Co., Ltd.
Address	Building No.1, No.8, Chuncheng Road, Quzhou City, Zhejiang Province /324000
Phone Number	+86-0570-3088893
Fax Number	+86-0570-3088873
WEB or E-mail	873@titrc.com
Emergency Phone Number	+86-0570-3088882 or call your nearest poison control centre.

2. Hazards identification	
GHS classification	Corrosive to metals 1 Acute toxicity-oral 4 Skin corrosion/irritation 1A Serious eye damage/eye irritation 1 Sensitisation-skin 1 Sensitisation-respiratory 1 Germ cell mutagenicity 1B Carcinogenicity 1A Reproductive toxicity 1B Specific target organ toxicity, single exposure 1 Specific target organ toxicity, single exposure 3 Specific target organ toxicity, repeated exposure 1 Hazardous to the aquatic environment, acute hazard 1 Hazardous to the aquatic environment, long-term hazard 1
GHS Pictograms	
Signal words	Danger
Hazard statements	H290:May be corrosive to metals H302:Harmful if swallowed H314:Causes severe skin burns and eye damage H318:Causes serious eye damage H334:May cause allergy or asthma symptoms or breathing difficulties if inhaled H317:May cause an allergic skin reaction H340:May cause genetic defects H350:May cause cancer

	H360:May damage fertility or the unborn child H370:Causes damage to organs H335:May cause respiratory irritation H372:Causes damage to organs through prolonged or repeated exposure H400:Very toxic to aquatic life H410:Very toxic to aquatic life with long lasting effects
Precautionary Statement Prevention	P203:Obtain, read and follow all safety instructions before use. P233:Keep container tightly closed. P234:Keep only in original packaging. P260:Do not breathe dust/fume/gas/mist/vapours/spray. P261:Avoid breathing dust/fume/gas/mist/vapours/spray. P264:Wash hands [and…] thoroughly after handing. P264+P265:Wash hands [and…] thoroughly after handing. Do not touch eyes. P270:Do not eat, drink or smoke when using this product. P271:Use only outdoors or with adequate ventilation. P272:Contaminated work clothing should not be allowed out of the work place. P273:Avoid release to the environment. P280:Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/… P284:In case of inadequate ventilation wear respiratory protection.
Precautionary Statement Response	P301+P317:IF SWALLOWED: Get medical help. P301+P330+P331:IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352:IF ON SKIN: Wash with plenty of water/… P302+P361+P354:IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. P304+P340:IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P354+P338:IF IN EYES:Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P316:IF exposed or concerned: Get emergency medical help immediately. P316:Get emergency medical help immediately. P317:Get medical help. P318:IF exposed or concerned: Get medical advice. P319:Get medical help if you feel unwell. P321:Specific treatment (see the supplemental first aid instruction).

	P330:Rinse mouth. P333+P317:If skin irritation or rash occurs: Get medical help. P342+P316:If experiencing respiratory symptoms: Get emergency medical help immediately. P362+P364:Take off contaminated clothing and wash it before reuse. P363:Wash contaminated clothing before reuse P390:Absorb spillage to prevent material damage. P391:Collect spillage.
Precautionary Statement Storage	P403:Store in a well-ventilated place. P403+P233:Store in a well-ventilated place. Keep container tightly closed. P405:Store locked up. P406:Store in corrosive resistant/…container with a resistant inner liner.
Precautionary Statement Disposal	P501:Dispose of contents/container in according with local regulation.
Other hazards which do not result in classification	Not applicable.

3. Composition/information on ingredients

☐**Substances**
√**Mixtures**
Component Information

Component	**CAS number**	**EINECS number**	**Mass(%wt)**
Sulphuric acid	7664-93-9	231-639-5	80-90
Water	7782-18-5	231-791-2	10-17
Potassium dichromate	7778-50-9	231-906-6	0.1-5
Mercury sulphate	7783-35-9	231-992-5	1-2
Disilver(1+) sulphate	10294-26-5	233-653-7	0.1-1

Note:1. Unless a component presents a severe hazard, it does not need to be considered in the SDS if the concentration is less than 1%.

4.First-aid measures

NOTE TO PHYSICIAN	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.
After inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Get immediate medical attention.
After skin contact	Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. If irritation persists, get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
After eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention immediately.

After ingestion	Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Loosen tight clothing such as a collar, tie, belt or waistband. Do not use mouth-to-mouth method if victim ingested the substance. Seek immediate medical attention.
Most important symptoms/effects, acute and delayed	Harmful if swallowed. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure.

5. Fire-fighting measures

Suitable extinguishing agents	Product is not flammable. Use fire fighting measures that suit the surrounding fire.
Special hazards caused by the material, its products of combustion or flue gases	Can be released in case of fire: Nitrogen oxides, sulphur oxides, metallic oxides.
Protective equipment for fire-fighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

6. Accidental release measures

Person-related safety precautions	Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.
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 governmental permits.
Measures for cleaning/collecting	Contain spillage. Pick up and arrange disposal in suitable container. Clean contaminated surface thoroughly.
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	Avoid contact with skin, eyes, mucous membranes and clothing. Avoid formation of dust and aerosols. Do not breathe dust/fume/gas/mist/vapours/spray. In case of insufficient ventilation, wear suitable respiratory equipment.
Information about protection against explosions and fires	Keep away from heat, sources of ignition, sparks or open flame. Prevent sun exposure.

STORAGE

Requirements to be met by storerooms and containers	Keep in a cool, dry, well-ventilated place. Keep tightly closed until used. Keep only in original container.
Information about storage in one common storage facility	Store away from incompatible substances such as strong oxidizing agents, strong bases, organic materials, metal powder, etc. Keep only in original container.
Further information about storage conditions	No data.

8. Exposure controls/personal protection

Limit Values for Exposure

Component	**CAS number**	**ACGIH TLV-TWA**	**ACGIH TLV-STEL**	**NIOSH REL-TWA**	**NIOSH REL-STEL**
Sulphuric acid	7664-93-9	0.2 mg/m^3	N.E.	1 mg/m^3	N.E.
Potassium dichromate	7778-50-9	0.0002 mg/m^3	0.0005 mg/m^3	0.0002 mg/m^3	N.E.
Mercury sulphate	7783-35-9	0.025 mg/m^3	N.E.	0.05 mg/m^3	N.E.
Disilver(1+) sulphate	10294-26-5	0.01 mg/m^3	N.E.	0.01 mg/m^3	N.E.

Appropriate engineering controls	Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower facility.
General protective and hygienic measures	Do not get this material in contact with skin. Do not get this material on clothing. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment	Splash goggles, gloves, apron and respirator.
Breathing equipment	No protective equipment is required under normal conditions of use. Ventilation and evacuation measures may be required if the limits are exceeded or irritation occurs.
Protection of hands	Wear appropriate chemical resistant gloves.
Eye/Face protection	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.E. means not established.

9.Physical and chemical properties

Physical state	Liquid
Colour	Orange
Odour	No data available
Melting point/freezing point	10-10.94 ℃ (Sulphuric acid)
Boiling point or initial boiling point and boiling range	290 ℃ (Sulphuric acid)
Flammability	Nonflammable
Lower and upper explosion limit/ flammability limit	No data available
Flash point	>100 ℃ (Closed cup)
Auto-ignition temperature	No data available
Decomposition temperature	340 ℃ (Sulphuric acid)
pH	<1
Kinematic viscosity	No data available
Solubility	Miscible with water.
Partition coefficient: n-octanol/water(log value)	No data available
Vapour pressure	0.13 kPa (145.8 ℃, Sulphuric acid)
Density and/or relative density	1.84 (Sulphuric acid)
Relative vapour density (air=1)	3.4 (Sulphuric acid)
Particle characteristics	Not applicable

10. Stability and reactivity

Reactivity	No data available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid (e.g. static discharge, shock or vibration)	Heat and flame and spark. The extreme temperatures and direct sunlight.
Incompatible materials	Avoid contact with strong oxidizing agents, strong bases,

	organic materials, metal powder, etc.
Hazardous decomposition products	Nitrogen oxides, sulphur oxides, metallic oxides, etc.

11.Toxicological information

This product is a preparation for which no toxicological data exists. When available, toxicological data for the product's hazardous ingredients are provided below.

Routes of Entry: Dermal contact, eye contact, inhalation, ingestion.

Acute Toxicity

Sulphuric acid (CAS 7664-93-9)	LD50 (Oral, rat): 2140 mg/kg LC50 (Inhalation, rat): 0.375 mg/l (4h) LD50 (Dermal, rabbit): N/A
Potassium dichromate (CAS 7778-50-9)	LD50 (Oral, rat): 90.5 mg/kg LC50 (Inhalation, rat): 0.083 mg/l (4 h) LD50 (Dermal, rabbit): 1100 mg/kg
Mercury sulphate (CAS 7783-35-9)	LD50 (Oral, rat): 25 mg/kg LC50 (Inhalation, rat): N/A LD50 (Dermal, rat): 625 mg/kg
Skin corrosion/Irritation	Causes severe skin burns.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	May cause genetic defects.
Carcinogenicity	May cause cancer.
Reproductive toxicity	May damage fertility or the unborn child.
STOT-single exposure	Causes damage to organs. May cause respiratory irritation.
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified
Chronic Effects	Not classified
Further Information	None.

12. Ecological information

Ecotoxicity

Aquatic Toxicity

Potassium dichromate (CAS 7778-50-9)

Test & Species

96 Hr LC50 Fish: 58.5 mg/l

48 Hr EC50 Daphnia: 0.035 mg/l

72 Hr EC50 Algae: 0.233 mg/l

Mercury sulphate (CAS 7783-35-9)

Test & Species

96 Hr LC50 Fish: 0.19 mg/l

48 Hr EC50 Daphnia: N/A

72 Hr EC50 Algae: N/A

Disilver(1+) sulphate (CAS 10294-26-5)

Test & Species

96 Hr LC50 Fish: 0.0012 mg/l

48 Hr EC50 Daphnia: 0.00022 mg/l

24 Hr EC50 Algae: 0.00041 mg/l

Persistence and degradability	Mercury sulphate (CAS 7783-35-9) and Disilver(1+) sulphate (CAS 10294-26-5): not easily biodegradable.
Bioaccumulative potential	Mercury sulphate (CAS 7783-35-9): Potential for bioaccumulation; Disilver(1+) sulphate (CAS 10294-26-5): No bioaccumulative potential.
Mobility in soil	Not available
Additional Information	Very toxic to aquatic life with long lasting effects.

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 3264
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(contains Sulfuric acid and Potassium dichromate)
Class/Division	Class 8 Corrosive Substances
Package Group	PG II
Subsidiary risk	—
labelling pictogram	
Maritime transport IMDG	Being same with TDG Marine pollutant (Yes/No): Yes
Air transport ICAO-TI and IATA-DGR	Being same with TDG

15. Regulatory information

European/International Regulations

OSHA:	Hazardous by definition of Hazard Communication Standard (29CFR 1910.1200).
EINECS Status:	The main components of this chemical are included in EINECS inventory.
EPA TSCA Status:	The main components of this chemical are included in TSCA

	inventory.
Canadian DSL (Domestic Substances List):	The main components of this chemical are included in DSL.
HMIS(Hazardous Material Identification System Ratings):	Health: 3 Flammability: 0 Physical hazard: 1 Personal protection: J (4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1. Slight Hazard; 0. Minimal Hazard)
WHMIS(Canadian Workplace Hazardous Material Identification System Ratings):	D2A, E (Sulphuric acid), C, D1A, D2A, E (Potassium dichromate), D1A (Mercury sulphate), D2B (Disilver(1+) sulphate).
GB 12268-2012 List of dangerous goods	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
Edit Date	08.05.2024
Update and Revise	Original 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）

200000124375

电话（Tel）：0571 8352 7220
传真（Fax）：0571 8352 7219
邮编（Post code）：311215
地址（Add.）：中国杭州市萧山区建设三路 398 号

正本/ORIGIN

编号：TCH24009720
No：TCH24009720
日期：2024-05-08
Date：2024-05-08

ZAIQ-RF(HH)-01-19

扫描查看在线报告

化学品安全数据表

申请单位：浙江迪特西科技有限公司

产品名称：预制试剂 R006

编制日期：2024-05-08

编制机构：杭州海关技术中心

批准人：

注：1.除非特别说明，本报告仅对样品负责。
2.未经本实验室许可，本报告不得部分复制。

杭州海关技术中心

国家危险化学品检测重点实验室（浙江）

200000124375

电话（Tel）：0571 8352 7220
传真（Fax）：0571 8352 7219
邮编（Post code）：311215
地址（Add.）：中国杭州市萧山区建设三路 398 号

正本/ORIGIN

编号：TCH24009720
No：TCH24009720
日期：2024-05-08
Date：2024-05-08

声　明

DECLARATION

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.

1. 标识

产品名称	预制试剂 R006
其他名称	COD 检测预制试剂
化学名称	无
使用建议	实验室使用。水质分析测定。
生产商	浙江迪特西科技有限公司
地址	浙江省衢州市春城路 8 号 1 幢/324000
固定电话	+86-0570-3088893
传真	+86-0570-3088873
网址或电子邮件地址	873@titrc.com
应急电话	+86-0570-3088882 或向离你最近的解毒中心求助

2. 危险标识

GHS 危险性分类

金属腐蚀剂 1类
急性毒性-口服 4类
皮肤腐蚀/刺激 1A类
严重眼损伤/眼刺激 1类
皮肤敏化作用 1类
呼吸敏化作用 1类
生殖细胞致突变性 1B类
致癌性 1A类
生殖毒性 1B类
特定目标器官毒性-单次接触 1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
危害水生环境-急性危险 1类
危害水生环境-长期危险 1类

GHS 危险标签



信号词 危险

危险说明

H290:可能腐蚀金属
H302:吞咽有害
H314:造成严重皮肤灼伤和眼损伤
H318:造成严重眼损伤
H334:吸入可能导致过敏、哮喘症状或呼吸困难
H317:可能引起皮肤过敏反应
H340:可能导致遗传性缺陷
H350:可能致癌
H360:可能对生育能力或胎儿造成伤害
H370:对器官造成损害

	H335:可能造成呼吸道刺激
	H372:长期或反复接触会对器官造成损害
	H400:对水生生物毒性极大
	H410:对水生生物毒性极大并具长期持续影响
防范说明	P203:使用前索取，阅读并遵照所有安全说明书。
预防	P233:保持容器密闭。
	P234:只能放在原容器中。
	P260:不要吸入粉尘/烟/气体/气雾/蒸气/喷雾。
	P261:避免吸入粉尘/烟/气体/气雾/蒸气/喷雾。
	P264:作业后彻底清洗手部[和……]
	P264+P265:作业后彻底清洗手部[和……]。勿触碰眼睛。
	P270:使用本产品时，不要进食、饮水或吸烟
	P271:只能在室外或充分通风的情况下使用。
	P272:受沾染的工作服不得带出工作场地。
	P273:避免释放到环境中。
	P280:戴防护手套/穿防护服/戴防护眼罩/戴防护面具/戴听力保护装置……
	P284:在通风不足的情况下戴呼吸防护装置。
防范说明	P301+P317:如误吞咽：寻求医疗救助。
反应	P301+P330+P331:如误吞咽：漱口。不要诱导呕吐。
	P302+P352:如皮肤沾染：用大量水或…清洗。
	P302+P361+P354:如皮肤沾染：立即脱掉所有沾染的衣服。立即用水冲洗皮肤几分钟。
	P304+P340:如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适。
	P305+P354+P338:如进入眼睛：立即用水冲洗几分钟。如戴隐形眼镜且可方便得取出，取出隐形眼镜。继续冲洗。
	P308+P316:如接触到：立即寻求紧急医疗救助。
	P316:立即寻求紧急医疗救助。
	P317:寻求医疗救助。
	P318:如接触到或有疑虑：求医。
	P319:如感觉不适，需求医。
	P321:具体治疗（见本标签上的附加急救措施）。
	P330:漱口。
	P333+P317:如发生皮肤刺激或皮疹：寻求医疗救助。
	P342+P316:如出现呼吸系统病症：立即寻求紧急医疗救助。
	P362+P364:脱掉沾染的衣服，清洗后方可重新使用。
	P363:沾染的衣服清洗后方可重新使用。
	P390:吸收溢出物，防止材料损坏。
	P391:收集溢出物。
防范说明	P403:存放于通风良好处。
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。
	P406:贮存于抗腐蚀/……带抗腐蚀衬里的容器中。

防范说明	P501:依据地方法规处置内装物/容器。
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(%wt)**
硫酸	7664-93-9	231-639-5	80-90
水	7782-18-5	231-791-2	10-17
重铬酸钾	7778-50-9	231-906-6	0.1-5
硫酸汞	7783-35-9	231-992-5	1-2
硫酸银	10294-26-5	233-653-7	0.1-1

注：1.在化学品安全数据表中无需考虑百分含量小于 1%的成分，除非该成分呈现出严重的危害性。

4.急救措施

对医师的建议	在呼吸急促的情况下，需给受害人输氧。保持受害人温暖。让受害人处于观察监护下。
吸入后	转移到有新鲜空气的地方。如需要，须输氧或进行人工呼吸。马上就医。
皮肤接触后	立即用大量的水冲洗皮肤。脱掉被污染的衣服和鞋子。如皮肤刺激仍继续：须求医。如原是小面积的皮肤接触，防止接触面积的扩大。污染的衣服在使用前，须单独清洗。
眼睛接触后	立即用大量的水冲洗眼睛至少 15 分钟。用手指分开眼睑以保证充分冲洗眼睛。马上就医。
摄入后	漱口。无医师建议的情况下不要引吐。如果受害人需呕吐，使其前倾以减少倒吸的危险。解松过紧的衣物，如领子、领带、皮带或腰带。不要使用嘴对嘴的方法实施救助。马上就医。
主要的症状和影响，包括急性和迟发效应	吞咽有害。 造成严重皮肤灼伤和眼损伤。 可能引起皮肤过敏反应。 吸入可能导致过敏、哮喘症状或呼吸困难。 可能导致遗传性缺陷。 可能致癌。 可能对生育能力或胎儿造成伤害。 对器官造成损害。 可能造成呼吸道刺激。 长期或重复接触会对器官造成损害。

5. 消防措施

合适的灭火剂	产品不易燃。使用适合周围火灾的消防措施。
由物质本身或其燃烧产物、烟气产生的特殊危险	在发生火灾时可能释放：氮氧化物，硫氧化物，金属氧化物等。
消防人员的特殊防护设备	穿全套防护衣物，包括头盔，呼吸器，防护服和面罩。

6. 泄露应急处理

与人相关的安全防范措施	确保通风充分。在穿上合适的防护服前，请勿触摸损坏的容器或泄漏物。在进入封闭空间前先通风。请不相关人员撤离。
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	控制泄露，收集并把废弃物放置在合适的容器中。彻底清洁被污染物的表面。
附加说明	关于安全操作的信息见第 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

7. 操作和存储

操作

安全操作的信息	避免和皮肤、眼睛、粘膜、衣服接触。 不要吸入粉尘/烟/气体/烟雾/蒸汽/喷雾。 避免产生粉尘和气溶胶。 在通风不充分的情况下，使用合适的呼吸设备。
防止爆炸和火灾的信息	远离热源，火源，火花，或明火。防暴晒。

存储

对储藏室和容器的要求	存放在阴凉、干燥、通风良好的地方。 使用前保持容器密闭。 只能在原容器中存放。
关于储藏在普通存储设施中的信息	远离不相容的物质如强氧化剂，强碱，有机材料，金属粉末等。 只能在原容器中存放。
关于储藏条件进一步的信息	无其他说明。

8. 暴露控制/人身保护

暴露限值

成分	CAS 号	ACGIH 阈限值-时间加权平均浓度	ACGIH 阈限值-短时间接触限值	NIOSH 阈限值-时间加权平均浓度	NIOSH 阈限值-短时间接触限值
硫酸	7664-93-9	0.2 mg/m^3	N.E.	1 mg/m^3	N.E.
重铬酸钾	7778-50-9	0.0002 mg/m^3	0.0005 mg/m^3	0.0002 mg/m^3	N.E.
硫酸汞	7783-35-9	0.025 mg/m^3	N.E.	0.05 mg/m^3	N.E.
硫酸银	10294-26-5	0.01 mg/m^3	N.E.	0.01 mg/m^3	N.E.

减少接触的工程控制方法	采用局部排气设备或者其他的工程控制措施来保持空气水平低于推荐暴露限值。 储存和使用该材料区域应配备一个洗眼器和一个安全淋浴设施。
一般保护和卫生措施	不要让该物质与皮肤、衣物、眼睛接触。依据良好的工业卫生和安全条例操作。在休息和一天工作结束前要洗手。
个人防护用品	防毒面具，防护服，防护手套，防护眼镜。

呼吸设备	在正常使用条件下无需防护设备。如超出超过限值或发生刺激，可能需要采取通风和疏散措施。
双手保护	戴合适的耐化学腐蚀的手套。
眼睛/面部保护	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，阻燃防静电防护服，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

物理状态	液体。
颜色	橙色
气味	无数据资料
熔点/凝固点	10-10.94 ℃ （硫酸）
沸点或初始沸点和沸程	290 ℃ （硫酸）
易燃性	不易燃
上、下爆炸极限/易燃极限	无数据资料
闪点	>100 ℃（闭杯）
自燃温度	无数据资料
分解温度	340 ℃ （硫酸）
pH 值	<1
运动粘度	无数据资料
溶解性	与水混溶。
分配系数：正辛醇/水（对数值）	无数据资料
蒸汽压	0.13 kPa （145.8 ℃，硫酸）
密度和/或相对密度（水=1）	1.84 （硫酸）
相对蒸气密度（空气=1）	3.4 （硫酸）
颗粒特征	不适用

10. 稳定性和反应活性

反应性	无数据资料。
化学稳定性	在推荐的贮存条件下稳定。
有害反应的可能性	无数据资料。
需避开的条件（如：静电放电，震动等）	热、火焰和火花。极端的温度和阳光直射。
不相容的物质	避免和强氧化剂，强碱，有机材料，金属粉末等接触。
有害分解产物	氮氧化物，硫氧化物，金属氧化物等。

11.毒理学信息

该配制品无现有毒性数据。现有的该产品的有害成分的毒性数据罗列如下。

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

硫酸（CAS 7664-93-9）	LD50（口服，大鼠）：2140 mg/kg
	LC50（吸入，大鼠）：0.375 mg/l (4h)
	LD50（皮肤，兔子）：未知
重铬酸钾（CAS 7778-50-9）	LD50（口服，大鼠）：90.5 mg/kg

	LC50（吸入，大鼠）：0.083 mg/l (4 h)
	LD50（皮肤，兔子）：1100 mg/kg
硫酸汞（CAS 7783-35-9）	LD50（口服，大鼠）：25 mg/kg
	LC50（吸入，大鼠）：未知
	LD50（皮肤，大鼠）：625 mg/kg
皮肤腐蚀/刺激	造成严重皮肤灼伤。
严重眼损伤/刺激	造成严重眼损伤。
呼吸或皮肤敏化作用	可能引起皮肤过敏反应。
	吸入可能导致过敏、哮喘症状或呼吸困难。
生殖细胞致突变性	可能导致遗传性缺陷。
致癌性	可能致癌。
生殖毒性	可能对生育能力或胎儿造成伤害。
特定目标器官毒性-单次接触	对器官造成损害。
	可能造成呼吸道刺激。
特定目标器官毒性-重复接触	长期或重复接触会对器官造成损害。
吸入危险	未分类
慢性影响	未分类
其他信息	无数据

12. 生态学信息

生态毒性

水生毒性

重铬酸钾（CAS 7778-50-9）

测试 &	物种
96 Hr LC50	鱼：58.5 mg/l
48 Hr EC50	溞类：0.035 mg/l
72 Hr EC50	藻类：0.233 mg/l

硫酸汞（CAS 7783-35-9）

测试 &	物种
96 Hr LC50	鱼：0.19 mg/l
48 Hr EC50	溞类：未知
72 Hr EC50	藻类：未知

硫酸银（CAS 10294-26-5）

测试 &	物种
96 Hr LC50	鱼：0.0012 mg/l
48 Hr EC50	溞类：0.00022 mg/l
24 Hr EC50	藻类：0.00041 mg/l

持久性和降解性	硫酸汞（CAS 7783-35-9）和硫酸银（CAS 10294-26-5）不易生物降解。
潜在的生物累积性	硫酸汞（CAS 7783-35-9）具有生物累积的潜力；硫酸银（CAS 10294-26-5）没有潜在的生物累积性。
土壤中的迁移性	未知
其他信息	对水生生物毒性极大并具长期持续影响。

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 3264
正式运输名称	无机酸性腐蚀性液体，未另作规定的（含硫酸和重铬酸钾）
危险类/项别	第 8 类 腐蚀性物质
包装类别	PG II
次要危险性	—
危险性标签	
国际海运危规 IMDG	与 TDG 的分类相同 海洋污染物（是/否）：是
国际空运危规 ICAO-TI 和 IATA-DGR	与 TDG 的分类相同

15. 法规信息

欧洲/国际法规

OSHA (美国职业安全和健康管理法):	危险性根据危害通讯标准来编写 (29CFR 1910.1200).
EINECS (欧洲现有商业化学物质名录):	该化学品的主要成分已被列入 EINECS 目录中。
EPA TSCA(有毒物质控制法):	该化学品的主要成分已被列入 TSCA 目录中。
加拿大 DSL(国内物质清单):	该化学品的主要成分已被列入 DSL 目录中。
HMIS(危险品识别系统):	健康危害：3 易燃性：0 物理危害：1 个人防护：J (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):	D2A, E（硫酸），C, D1A, D2A, E（重铬酸钾），D1A（硫酸汞），D2B（硫酸银）。
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》 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	2024.05.08
更新和修改	第 1 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