



杭州海关技术中心
国家危险化学品检测重点实验室（浙江）



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: TCH24024114
No: TCH24024114
日期: 2024-10-08
Date: 2024-10-08

ZAIQ-RF(HH)-01-19

Safety Data Sheet

扫描查看在线报告



Applicant name:

Product Name: Tire repair tools kit (Flame retardant vulcanizing cement (S-402)) :

Edit date: 2024-10-08

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）



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: TCH24024114
No: TCH24024114
日期: 2024-10-08
Date: 2024-10-08

ZAIQ-RF(HH)-01-19

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	Tire repair tools kit (Flame retardant vulcanizing cement (S-402))		
Trade Name	None		
Chemical Name	None		
Recommended Use	Used for tire repairing		
Supplier			
Address			
Phone Number			
Fax Number	None		
WEB or E-mail	None		
Emergency Number	Phone	+86-17557209879 or call your nearest poison control centre	

2. Hazards identification

GHS classification	Skin corrosion/irritation 2 Serious eye damage/eye irritation 2A Sensitisation-skin 1 Germ cell mutagenicity 2 Carcinogenicity 1B Specific target organ toxicity, single exposure 3 Hazardous to the aquatic environment, acute hazard 2 Hazardous to the aquatic environment, long-term hazard 2		
GHS Pictograms			
Signal words	Danger		
Hazard statements	H315:Causes skin irritation H319:Causes serious eye irritation H317:May cause an allergic skin reaction H341:Suspected of causing genetic defects H350:May cause cancer H336:May cause drowsiness or dizziness H401:Toxic to aquatic life H411:Toxic to aquatic life with long lasting effects		
Precautionary Statement	P203:Obtain, read and follow all safety instructions before use. P261:Avoid breathing dust/fume/gas/mist/vapours/spray. P264:Wash hands [and...] thoroughly after handling. P264+P265:Wash hands [and...] thoroughly after handling. Do not touch eyes. P271:Use only outdoors or with adequate ventilation.		
Prevention			

Precautionary Statement Response	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/...
	P302+P352:IF ON SKIN: Wash with plenty of water/...
	P304+P340:IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338:IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	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).
	P332+P317:If skin irritation occurs:Get medical help.
Precautionary Statement Storage	P333+P317:If skin irritation or rash occurs: Get medical help.
	P337+P317:If eye irritation persists: Get medical help.
	P362+P364:Take off contaminated clothing and wash it before reuse.
Precautionary Statement Disposal	P391:Collect spillage.
	P403+P233:Store in a well-ventilated place. Keep container tightly closed.
	P405:Store locked up.
Other hazards which do not result in classification	P501:Dispose of contents/container in according with local regulation.
	Not available.

3. Composition/information on ingredients

☐ Substances

☒ Mixtures

Component Information

Component	CAS number	EINECS number	Mass(%wt)
Trichloroethylene	79-01-6	201-167-4	90
Natural rubber	9003-31-0	618-362-9	10

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.
After inhalation	Keep victim under observation. Symptoms may be delayed. 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	First rinse with plenty of water for several minutes (remove contact lenses if easily possible). Assure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention immediately.
After ingestion	Rinse mouth with water immediately and drink plenty of water. 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	Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer. May cause drowsiness or dizziness. Trichloroethylene has an anesthetic effect on the central nervous system. It can also cause damage to the liver, kidneys, heart, and trigeminal nerve. Acute poisoning: Short term exposure (inhalation, transdermal or oral) to a large amount of this product can cause acute poisoning. Inhaling extremely high concentrations can quickly cause coma. Inhalation of high concentrations can cause irritation to the eyes and upper respiratory tract. After several hours of contact, symptoms such as headache, dizziness, drunkenness, and drowsiness may occur. In severe cases, delirium, convulsions, coma, respiratory paralysis, and circulatory failure may occur. Cranial nerve damage, mainly trigeminal nerve damage, may occur, while cardiac damage is mainly arrhythmia. There may be liver and kidney damage. Oral gastrointestinal symptoms are obvious, with prominent liver and kidney damage. Chronic poisoning: symptoms include headache, dizziness, fatigue, sleep disorders, gastrointestinal dysfunction, peripheral neuritis, myocardial damage, trigeminal nerve paralysis, and liver damage. It can cause drug-induced dermatitis, and in severe cases, exfoliative dermatitis may occur, accompanied by superficial lymph node enlargement and liver damage.
5. Fire-fighting measures	
Suitable extinguishing agents	Foam, dry powder, carbon dioxide, water spray. Water spray can be used to cool closed containers.

Special hazards caused by the material, its products of combustion or flue gases	Can be released in case of fire: carbon oxides, hydrogen chloride, phosgene, dichloroacetylene, underburned hydrocarbons.
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. Remove all sources of ignition. 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	If there is a large amount of overflow, cover the inlet of the sewer and build a protective embankment to prevent the overflow from flowing into the sewer or water environment. Seal the container. Evacuate unprotected personnel. Extinguish all ignition sources. Ventilate the workplace with fresh air. In case of large spills or in confined spaces, use mechanical ventilation to disperse and vent vapors. Cover with inorganic absorbent. Collect the produced solution containing residues in a container and dispose of as soon as possible.
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. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid breathing dust/fume/gas/mist/vapours/spray. Eating, drinking and smoking should be prohibited strictly in the operation, storage, and processing areas. Workers should wash hands and face before eating, drinking and smoking. Empty containers may contain harmful residues.
Information about protection against explosions and fires	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Take measures to prevent the build up of electrostatic charge.
STORAGE	
Requirements to be met by storerooms and containers	Store in a cool, well-ventilated warehouse without direct sunlight. Keep away from fire and heat sources. Store separately from oxidants, acids, alkalis and feed, and avoid

Information about storage in one common storage facility	mixed storage. Store in original container, keep container tightly closed when not in use. Regularly inspect all containers to ensure clear labels and containers are free of damage and leaks. When storing in large quantities, the corresponding variety and quantity of fire fighting equipment and ventilation facilities should be provided.
Further information about storage conditions	Separate from strong oxidants, strong oxidant, strong reducing agent, strong alkali, aluminum, magnesium. 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
Trichloroethylene	79-01-6	10 ppm	25 ppm	N.E.	N.E.
Natural rubber	9003-31-0	N.E.	N.E.	N.E.	N.E.
Appropriate engineering controls	Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower facility. Use adequate ventilation to keep airborne concentrations low.				
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, lab coat and respirator or mask.				
Breathing equipment	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.				
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. not established.					

9. Physical and chemical properties

Physical state	Transparent liquid
Colour	Slightly yellow
Odour	Pungent odour
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling	>35 °C

range	
Flammability	No data available
Lower and upper explosion limit/flammability limit	No data available
Flash point	>100 °C (Closed cup)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	No data available
Partition coefficient: n-octanol/water(log value)	No data available
Vapour pressure	No data available
Density and/or relative density (water=1)	Approximately 1.4 g/ml
Relative vapour density (air=1)	No data available
Particle characteristics	Not applicable

10. Stability and reactivity

Reactivity	Decomposes on contact with hot surfaces or flames. This produces toxic and corrosive fumes of phosgene and hydrogen chloride. Decomposes on contact with strong alkali. This produces dichloroacetylene. Reacts violently with finely divided metals. This generates fire and explosion hazard. Slowly decomposed by light in the presence of moisture. This produces corrosive hydrochloric acid.
Chemical stability	Stable under recommended conditions of storage.
Possibility of hazardous reactions	Not polymerized.
Conditions to avoid (e.g. static discharge, shock or vibration)	Incompatible materials, high heat, open fire, light and other sources of ignition.
Incompatible materials	Strong oxidants, strong oxidant, strong reducing agent, strong alkali, aluminum, magnesium.
Hazardous decomposition products	Carbon oxides, hydrogen chloride, phosgene, dichloroacetylene underburned hydrocarbons.

11. Toxicological information

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

Acute Toxicity

Trichloroethylene (CAS LD50 (Oral, rat): 4920 mg/kg

79-01-6)	LC50 (Inhalation, rat): 26 mg/l (4 h) LD50 (Dermal, rabbit): 29000 mg/kg
Skin corrosion/Irritation	Causes skin irritation
Serious eye damage/irritation	Causes serious eye irritation
Respiratory or skin sensitization	May cause an allergic skin reaction
Germ cell mutagenicity	Suspected of causing genetic defects
Carcinogenicity	May cause cancer
Reproductive toxicity	Not classified
STOT-single exposure	May cause drowsiness or dizziness
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Chronic Effects	Not classified
Further Information	None

12. Ecological information

Ecotoxicity	
Aquatic Toxicity	Trichloroethylene (CAS 79-01-6) Test & Species 96 Hr LC50 fish: 28.3 mg/l 48 Hr EC50 Daphnia: 2.2 mg/l 72 Hr EC50 Algae: 36.5 mg/l
Persistence and degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	Not available
Additional Information	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 1710
Proper Shipping Name	TRICHLOROETHYLENE SOLUTION
Class/Division	Division 6.1 Toxic Substances
Package Group	PG III
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 (Except Natural rubber) are included in EINECS inventory.

EPA TSCA Status: The main components of this chemical are included in TSCA inventory.

Canadian DSL The main components of this chemical are included in DSL.

(Domestic Substances List):

HMIS (Hazardous Material Identification System Ratings):

Health: 2
 Flammability: 1
 Physical hazard: 0
 Personal protection: I
 (4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1. Slight Hazard; 0. Minimal Hazard)

WHMIS (Canadian Workplace Hazardous Material Identification System Ratings):

D1B, D2A (Trichloroethylene).

GB 12268-2012 List of dangerous goods This product 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

08.10.2024

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