

浙江省检验检疫科学技术研究院 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

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Safety Data Sheet

Applicant name: ZHEJIANG ZHONGTIAN FLUORINE SILICON MATERIAL CO., LTD.

Product Name: Hexamethylcyclotrisiloxane

Edit date: 9th August, 2018

Edit institution: Zhejiang Academy of Science and Technology for

Inspection and Quarantine

Approver:

万服军

1. Unless other wise stated, this test report is only responsible for the sample(s).

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| CO MILE. | |
|-------------------|--|
| | 1. Identification of substance |
| Product Name | Hexamethylcyclotrisiloxane |
| Other Name | None |
| Chemical Name | None |
| Recommended Use | Used for raw material of 107 RTV Silicone Rubber and hydroxy silicone oil. |
| Manufacturer Name | ZHEJIANG ZHONGTIAN FLUORINE SILICON MATERIAL CO., LTD. |
| Address | No.20 Huayin North Road, High-tech Industrial Park, Quzhou |

City, Zhejiang Province, China /314004 Phone Number +86-570-5898038 Fax Number +86-570-8598000

WEB None

Emergency Phone +86-570-8598051 or call your nearest poison control centre.

Number

2. Hazards identification

GHS classification Flammable solids 1 Skin corrosion/irritation 2 Serious eye damage/eye irritation 2A

Reproductive toxicity 2

Specific target organ toxicity, single exposure 3

GHS Pictograms



Signal words Danger

Hazard statements H228: Flammable solid H315: Causes skin irritation

H319: Causes serious eye irritation

H335: May cause respiratory irritation

H361: Suspected of damaging fertility or the unborn child

Precautionary Statement

P201: Obtain special instructions before use. Prevention

P202: Do not handle until all safety precautions have been read and understood.

P210 : Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

P240: Ground/bond container and receiving equipment.

P241 : Use explosion-proof electrical/ventilating/lighting equipment.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

NOTE TO PHYSICIAN

After inhalation

| 240 | | | 740 | |
|---|---|----------------------------|--|--|
| Zalia de la companya | | protective gloves/prote | ective clothing/eye | |
| 2418 2418 | protection/face protection. | | | |
| Precautionary Statement | P302+P352: IF O | N SKIN: Wash with plen | ty of water. | |
| Response | | HALED: Remove person | | |
| 290 | comfortable for br | | 2010 | |
| Z400 Z400 | | 3: IF IN EYES: Rinse caut | iously with water for | |
| Z410 | | Remove contact lenses, if | - CHILL | |
| 2910 2910 | do. Continue rinsi | | 2410 | |
| 2418 2418 | | exposed or concer | ned: Get medical | |
| 2718 | advice/attention. | | 2/HG 2/HG | |
| 2410 2410 | | ON CENTER/doctor if yo | u feel unwell. | |
| 2011 | | reatment (see the sup | | |
| 2111 | instruction). | | 27m2 27m3 | |
| 20114 20113 | | f skin irritation occu | urs: Get medical | |
| 2914 | advice/attention. | | 2/10 2/10 | |
| 240 | P337+P313 : If eye irritation persists: Get med advice/attention. | | | |
| 210 | | | | |
| P362+P364: Take off immediately contaminated clothi | | | | |
| 2414 2414 | wash it before reuse. | | | |
| | P370+P378: In ca | ase of fire: Use extinguis | her to extinguish. | |
| Precautionary Statement | | e in a well-ventilated pla | The state of the s | |
| Storage | tightly closed. | | 2/01/2 | |
| 2418 | P405: Store locke | ed up. | 2/41U | |
| Precautionary Statement | P501 Dispose of | contents/container in a | ccording with local | |
| Disposal | regulation. | | 700 | |
| Other hazards which do | Not applicable. | | | |
| not result in classification | | | 2/10 2/10 | |
| 3. | Composition/inform | nation on ingredients | | |
| □Substances | | | 24th 24th | |
| √ Mixtures | | | 2/10 2/10 2/10 | |
| Component Information | | | 291R 291R | |
| Component | CAS number | EINECS number | Mass(%) | |
| Hexamethylcyclotri- | E44 0E 0 | | 240 | |
| siloxane | 541-05-9 | 208-765-4 | 95%wt | |
| Octamethylcyclotetra- | FFC 67.0 | | 2/4112 2/4112 | |
| siloxane | 556-67-2 | 209-136-7 | 5%wt | |
| Note: 1. Unless a compone | nt presents a severe | hazard, it does not need | to be considered in | |
| the SDS if the concentration | | | 2/112 | |
| | 4.First-aid | measures | The state of the s | |
| | | | | |

Keep victim under observation.

immediate medical attention.

In case of shortness of breath, give oxygen. Keep victim warm.

Move to fresh air. Oxygen or artificial respiration if needed. Get

| After skin contact | Immediately flush skin with plenty of water. Remove and |
|---|---|
| Zillia | isolate contaminated clothing and shoes. If irritation persists, |
| 2419 2419 | get medical attention immediately. For minor skin contact |
| 2416 2410 2410 | avoid spreading material on unaffected skin. |
| After eye contact | Wash clothing separately before reuse. |
| witter eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing of the eyes by separating |
| 27110 27110 27110 | the eyelids with fingers. Get medical attention immediately. |
| After ingestion | Do not induce vomiting without medical advice. If vomiting |
| Anter mgestion | occurs naturally, have victim lean forward to reduce risk of |
| 7 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10 | aspiration. Loosen tight clothing such as a collar, tie, belt or |
| 2/10 | waistband. Do not use mouth-to-mouth method if victim |
| ZAIDI ZAIDI | ingested the substance. Seek immediate medical attention. |
| Most important | Causes skin irritation |
| symptoms/effects, acute | Causes serious eye irritation |
| and delayed | May cause respiratory irritation |
| AND | Suspected of damaging fertility or the unborn child |
| Suitable extinguishing | 5. Fire-fighting measures |
| Suitable extinguishing agents | Carbon dioxide, dry sand, dry chemical powder. |
| Special hazards caused | Can be released in case of fire: |
| by the material, its | Carbon oxides, silicon dioxide. |
| products of combustion | |
| or flue gases | |
| Protective equipment for | Wear self-contained breathing apparatus, a chemical safety |
| fire-fighters | goggles, antistatic work clothes, rubber gloves. |
| DAIN TO THE PARTY OF THE PARTY | 6. Accidental release measures |
| Person-related safety | Ensure adequate ventilation. Avoid formation of dust. |
| precautions | Remove all sources of ignition. |
| Zeliki Zeliki Zeliki | Ventilate closed spaces before entering. Keep unnecessary personnel away. |
| Measures for | Prevent further leakage or spillage if safe to do so. Do not allow |
| environmental protection | material to be released to the environment without proper |
| 2/10 | governmental permits. |
| Measures for | Sweep off and arrange disposal in suitable container. Clean |
| cleaning/collecting | contaminated surface thoroughly. |
| Additional information | See Section 7 for information on safe handling |
| Z4ID | See section 8 for information on personal protection |
| 710 210 | equipment. See Section 13 for information on disposal. |
| 7410 2305 | |
| Udli | 7. Handling and storage |
| Handling | |

| 2/102 | 1975 |
|--|---|
| Information for safe handling | Avoid contact with skin, eyes, mucous membranes and clothing. Avoid formation of dust and aerosols. |
| ZAID CONTRACT TO SECOND | Ensure workshop has good ventilation/exhaust device. |
| Z410 2410 2410 2410 2410 | In case of insufficient ventilation, wear suitable respiratory equipment if ingested. |
| Information about | Keep away from heat, sources of ignition - No smoking. Tak |
| protection against explosions and fires | measures to prevent the build up of electrostatic charge. |
| STORAGE | |
| Requirements to be met | Keep in a cool, dry, well-ventilated place. |
| by storerooms and containers | Keep tightly closed. Do not contact with water. |
| Information about | Store away from incompatible substances such as water, |
| storage in one common | strong oxidizing agents. |
| storage facility | Protect from heat and dampness. |
| Further information about storage conditions | |
| 8. | Exposure controls/personal protection |

| 8. Exposure controls/personal protection | | | | |
|---|---|---|---|-------------------|
| | A AX | | | 291G |
| CAS number | ACGIH TLV-TWA | ACGIH TLV-STEL | NIOSH PEL-TWA | NIOSH PEL-STEL |
| 541-05-9 | N.E. | N.E. | N.E. | N.E. |
| 556-67-2 | N.E. | N.E. | N.E. | N.E. |
| Use adequate | ventilation | to keep airbo | orne concen | trations low. |
| 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. | | | | |
| | | | | 27 1122 |
| When workers are facing high concentrations they must use appropriate certified respirators. | | | | |
| Wear appropriate chemical resistant gloves. | | | | |
| Use safety glasses with side shields or safety goggles as mechanical barrier for prolonged exposure. | | | | |
| 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. | | | | |
| | CAS number 541-05-9 556-67-2 Use adequate Do not get thi material on classic accordance with wash hands be Gloves, safety When workers appropriate cet wear appropriate cet | CAS number 541-05-9 N.E. 556-67-2 N.E. Use adequate ventilation Do not get this material in material on clothing. Avoid accordance with good individed wash hands before break Gloves, safety glasses with when workers are facing appropriate certified respirate certified respirate certified respirate chemical use safety glasses with simechanical barrier for professional professional professional conding to the amount as substance at the work plant. | CAS number 541-05-9 N.E. N.E. 556-67-2 N.E. N.E. Use adequate ventilation to keep airbound in contact with material on clothing. Avoid contact with accordance with good industrial hygie Wash hands before breaks and at the Gloves, safety glasses with protective When workers are facing high concent appropriate certified respirators. Wear appropriate chemical resistant guse safety glasses with side shields of mechanical barrier for prolonged experiences and is the mechanical barrier for prolonged experiences and is the mechanical barrier for prolonged experiences. | CAS number |

| | 9.Physical and chemical properties |
|--|---|
| Physical state | Crystal |
| Colour | White |
| Odour | No data available |
| Melting point/freezing | 50-64 ℃ |
| point | 2980 2980 |
| Boiling point or initial | 134℃ (101.3kPa) |
| boiling point and boiling | 700 × 100 × |
| range | NAINS AUD SAUD |
| Flammability | Flammable |
| Lower and upper | No data available |
| explosion limit/ | |
| flammability limit | 2910 2910 2910 |
| Flash point | 35 ℃ (Closed cup) |
| Auto-ignition | No data available |
| temperature | 2/10 Z/10 |
| Decomposition | No data available |
| temperature | |
| pH | No data available |
| Kinematic viscosity | No data available |
| Solubility | Insoluble in water and soluble in organic solvents such as |
| ALL | benzene. |
| Partition coefficient: | No data available |
| n-octanol/water(log | |
| value) | |
| Vapour pressure | No data available |
| All Ed | |
| Density and/or relative | 1.02 (25 °C) |
| density | Zilla Zi |
| Relative vapour density | No data available |
| (air=1) | Zing Zing Zing Zing Zing Zing Zing Zing |
| Particle characteristics | No data available |
| | 10. Stability and reactivity |
| Chemical stability | This is a stable chemical under recommended storage |
| MICE TO THE TAXABLE PROPERTY OF THE PARTY OF | conditions. |
| Possibility of hazardous | No data available. |
| reactions | 2410 |
| Conditions to avoid (e.g. | Heat, flames and sparks. extreme temperatures and direct |
| static discharge, shock or | sunlight. Exposure to wet. |
| vibration) | |
| Incompatible materials | Oxidizing agents. Water/moist air. |
| Hazardous decomposition | Carbon oxides, silicon dioxide. |
| products | 7/102 7/102 |
| AND THE STREET | |

11. Toxicological information

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

Acute Toxicity

Hexamethylcyclotri-LD50 (Oral,rat) N/A

siloxane: LC50 (Inhalation,rat) N/A (CAS 541-05-9) LD50 (Dermal, rabbit) N/A

Skin corrosion/Irritation Causes skin irritation.

Serious eye Causes serious eye irritation.

damage/irritation

Respiratory or skin Not classified

sensitization

Germ cell mutagenicity Not classified Carcinogenicity Not classified

Reproductive toxicity Suspected of damaging fertility or the unborn child.

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure Not classified Aspiration hazard Not classified Chronic Effects Not classified

Further Information No data

12. Ecological information

Ecotoxicity

Aquatic Toxicity Hexamethylcyclotrisiloxane(CAS 541-05-9)

Test & Species

96 Hr LC50 Fish: > 1.6 mg/l 48 Hr EC50 Daphnia: > 1.6 mg/l

72 Hr EC50 Algae: > 1.6 mg/l

Persistence and Not available

degradability

Bioaccumulative potential Not available Mobility in soil Not available

Additional Information Not toxic to aquatic life.

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 1325

Proper Shipping Name FLAMMABLE SOLID, ORGANIC, N.O.S.

(Hexamethylcyclotrisiloxane)

Class/Division Division 4.1 Flammable Solids Package Group Subsidiary risk labelling pictogram

PG II None



Maritime transport IMDG/ Being same with TDG/ No

Marine pollutant (Yes/No)

Air transport ICAO-TI and Being same with TDG

IATA-DGR

15. Regulatory information

European/International Regulations

OSHA: Hazardous by definition of Hazard Communication

This chemical is included in DSL.

Standard(29CFR 1910.1200).

EINECS Status: This chemical is included in EINECS inventory.

EPA TSCA Status: This chemical is included in TSCA inventory.

Canadian

DSL(Domestic

Substances List):

HMIS(Hazardous

Material Identification

System Ratings):

Health: 2

Not listed.

Flammability: 3 Physical hazard: 1

Personal protection: F

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

Slight Hazard; 0. Minimal Hazard)

WHMIS(Canadian

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 judgement 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. 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 ADR: European Agreement concerning the International Carriage of acronyms

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

Edit Date

09.08.2018 Original edition **Update and Revise**

Edit Standard

Globally Harmonized System of Classification and Labelling for

Chemicals Part 1.5

Revised Institution

Zhejiang Academy of Science and Technology for Inspection and

Quarantine