# SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0 Creation Date: Nov. 13, 2018 Revision Date: Nov. 13, 2018

### 1. Identification

### 1.1 GHS Product identifier

**Product name** CFS-724, Dodecyltrichlorosilane

#### 1.2 Other means of identification

**Product number** CFS-724

Other names Dodecyltrichlorosilane; Trichloro(dodecyl)silane;

trichloro(dodecyl)silane

### 1.3 Recommended use of the chemical and restrictions on use

Identified usesOnly for Industrial UseUses advised againstno data available

### 1.4 Supplier's details

Company Hubei Co-Formula Material Tech Co.,Ltd.

Address C1420-1421, Longyang Avenue, Wuhan 430056, Hubei, China

**Telephone** +86-27-84459282 **Fax** +86-27-84459282

### 1.5 Emergency phone number

**Emergency phone number** +86-27-84459282

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8

hours).

### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

Skin corrosion, Category 1B

### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word Danger

**Hazard statement(s)** H314 Causes severe skin burns and eye damage

Precautionary statement(s)

**Prevention** P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

**Response** P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower].

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor/...

P321 Specific treatment (see ... on this label).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

**Storage** P405 Store locked up.

**Disposal** P501 Dispose of contents/container to an appropriate treatment and

disposal facility in accordance with applicable laws and regulations, and

product characteristics at time of disposal.

### 2.3 Other hazards which do not result in classification

no data available

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Trichloro(dodecyl)silane	Dodecyltrichlorosilane	4484-72-4	224-769-9	> 96%

### 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### General advice

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eve contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

# 5. Fire-fighting measures

### 5.1 Extinguishing media

### Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

### 5.2 Specific hazards arising from the chemical

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **6.2** Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 7. Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# 8. Exposure controls/personal protection

### 8.1 Control parameters

#### **Occupational Exposure limit values**

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

# 9. Physical and chemical properties

### Physical state

**Colorless** 

Odourno data availableMelting point/ freezing point238°C(dec.)(lit.)Boiling point or initial293-294°C(lit.)

boiling point and boiling

range

Flammability no data available Lower and upper explosion no data available

limit / flammability limit

Flash point 110°C

Auto-ignition temperature no data available Decomposition temperature no data available no data available no data available Kinematic viscosity no data available Solubility no data available no data available no data available

octanol/water

Vapour pressure Density and/or relative

density

no data available 1.02g/mLat 25°C(lit.)

1.025 112.00 20 0(110

**Relative vapour density** no data available **Particle characteristics** no data available

### 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

# 11. Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### **STOT-single exposure**

no data available

### **STOT-repeated exposure**

no data available

### **Aspiration hazard**

no data available

## 12. Ecological information

### 12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

#### 12.5 Other adverse effects

no data available

# 13. Disposal considerations

### 13.1 Disposal methods

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# 14. Transport information

### 14.1 UN Number

ADR/RID: UN1771 IMDG: UN1771 IATA: UN1771

### 14.2 UN Proper Shipping Name

ADR/RID: DODECYLTRICHLOROSILANE IMDG: DODECYLTRICHLOROSILANE IATA: DODECYLTRICHLOROSILANE

#### 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

#### 14.4 Packing group, if applicable

ADR/RID: II IATA: II IMDG: II

#### **Environmental hazards** 14.5

ADR/RID: No IMDG: No IATA: No

#### Special precautions for user 14.6

no data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

#### **15. Regulatory information**

#### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Trichloro(dodecyl)silane	Dodecyltrichlorosilane	4484-72-4	224-769-9
European Inventory of (EINECS)	Not Listed.		
EC Inventory	Not Listed.		
<b>United States Toxic St</b>	Not Listed.		
China Catalog of Haz	Not Listed.		
New Zealand Inventor	Not Listed.		
Philippines Inventory (PICCS)	Not Listed.		
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inv IECSC)	rentory of Existing Chemical Subs	tances (China	Not Listed.

#### 16. Other information

### Information on revision

**Creation Date** Nov. 13, 2018 **Revision Date** Nov. 13, 2018

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
  STEL: Short term exposure limit
  LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Šubstances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/

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