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-548, Azidotrimethylsilane

1.2 Other means of identification

Product number CFS-548

Other names Trimethylsilyl azide; TriMethylsilylazide; azido(trimethyl) 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

Flammable liquids, Category 2 Acute toxicity - Oral, Category 3 Acute toxicity - Dermal, Category 3 Acute toxicity - Inhalation, Category 3

2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word Danger

Hazard statement(s) H225 Highly flammable liquid and vapour

H301 Toxic if swallowed H311 Toxic in contact with skin

H331 Toxic if inhaled

Precautionary statement(s)

Prevention P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking. P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

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

P370+P378 In case of fire: Use ... to extinguish.

P301+P310 IF SWALLOWED: Immediately call a POISON

CENTER/doctor/...

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

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/... P312 Call a POISON CENTER/doctor/...if you feel unwell.

P361+P364 Take off immediately all contaminated clothing and wash it

before reuse.

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

comfortable for breathing.

P311 Call a POISON CENTER/doctor/...

P403+P235 Store in a well-ventilated place. Keep cool. **Storage**

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly

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.

Other hazards which do not result in classification 2.3

no data available

Response

3. Composition/information on ingredients

3.1 **Substances**

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Azidotrimethylsilane	Azidotrimethylsilane	4648-54-8	225-078-5	> 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 eye 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

no data available

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

Odour no data available

Melting point/ freezing point 145°C(lit.)

Boiling point or initial 97°C(lit.)

boiling point and boiling

range

Flammability no data available **Lower and upper explosion** no data available

limit / flammability limit

Flash point 13°C(lit.)

Auto-ignition temperature no data available
Decomposition temperature no data available
pH no data available
Kinematic viscosity no data available
Solubility In water: decomposes
Partition coefficient n- no data available

octanol/water

Vapour pressure no data available

Density and/or relative

density

no data available

0.876

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: UN1992 IMDG: UN1992 IATA: UN1992

14.2 UN Proper Shipping Name

ADR/RID: FLAMMABLE LIQUID, TOXIC, N.O.S. IMDG: FLAMMABLE LIQUID, TOXIC, N.O.S. IATA: FLAMMABLE LIQUID, TOXIC, N.O.S.

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packing group, if applicable

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: No IMDG: No IATA: No

14.6 Special precautions for user

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
Azidotrimethylsilane	Azidotrimethylsilane	4648-54-8	225-078-5
European Inventor (EINECS)	Not Listed.		
EC Inventory	Not Listed.		
United States Toxic	Not Listed.		
China Catalog of H	Not Listed.		
New Zealand Inven	Not Listed.		
Philippines Invento (PICCS)	Not Listed.		
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical I IECSC)	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 Substances 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
- CÂMEO 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/

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.