



可为药业有限公司

Canchem Pharmaceutical Co., Ltd

## Product Description of Trisilylamine

### 1. Product Introduction

Chinese Name: 三甲硅烷基胺

English Name: Trisilylamine (abbreviated as TSA)

Molecular Formula:  $(\text{SiH}_3)_3\text{N}$

### 2. Physical and Chemical Properties

- Appearance and State: Colorless transparent liquid
- Odor: No information available
- Melting Point:  $-106^{\circ}\text{C}$
- Boiling Point:  $52^{\circ}\text{C}$  (initial)
- Density:  $0.895\text{ g/cm}^3$
- Solubility: Soluble in hydrocarbon solvents
- Flammability: Highly flammable

### 3. Storage Conditions

- As a flammable liquid, it should be stored in a cool, dry, and well-ventilated warehouse.
- Keep away from ignition sources, heat sources, and direct sunlight. Avoid storing it together with combustible materials, oxidants, acids, chlorine, bromine, carbon tetrachloride, ammonia, acetonitrile, etc. Mixing storage is strictly prohibited.
- The lighting and ventilation facilities in the storage area should be of explosion-proof type, and the switches should be installed outside the warehouse.
- Fire-fighting equipment such as dry sand, fire blankets, and Class D dry powder fire extinguishers should be equipped.

## 4. Safety Warnings

- **Product Hazards**

- Causes severe skin burns and eye damage. Fatal if inhaled.

- **Hazardous Characteristics**

- Unstable at high temperatures. May auto-ignite in air. Reacts violently with water to release flammable gases, which can cause combustion and explosion.

- **Storage and Handling**

- The product should be stored in a sealed steel container and handled in an inert gas environment to avoid contact with water and air. When handling the steel cylinder, appropriate protective measures (protective gloves, goggles, and face masks) should be taken.

- **Fire-fighting Methods**

- Use dry sand, stones, fire blankets, and dry powder extinguishers. Water, carbon dioxide, and foam are strictly prohibited.

- **Leak Emergency Response**

- Isolate the leak area, evacuate irrelevant personnel, stay away from the leak area and be in the upwind direction. Emergency responders should wear breathing masks and full-body protective clothing to avoid inhaling vapors, smoke, gases, or dust. Take measures to prevent further leakage or spillage when it is safe to do so. For minor leaks, dry sand or inert adsorbent materials can be used to absorb the leaked substance. For major leaks, dikes should be built for containment. The adhered or collected substances should be stored in suitable sealed containers and disposed of in accordance with local laws and regulations. Eliminate all ignition sources and use spark-proof tools and explosion-proof equipment.

- **Health Hazards**

- Causes severe skin burns and eye damage. Fatal if inhaled.

5. Product Specifications (Key Elements)

- Electronic Grade

No.	Item	Electronic Grade	Units
1	Ag	0.5	ppb
2	Al	0.5	ppb
3	Ca	1.5	ppb
4	Cu	1	ppb
5	Fe	1	ppb
6	K	1	ppb
7	Li	0.5	ppb
8	Mg	0.5	ppb
9	Mn	0.5	ppb
10	Na	0.5	ppb
11	Ni	0.5	ppb
12	Sn	0.5	ppb
13	Ti	0.5	ppb
14	Zn	1	ppb
15	Chloride	1	ppm
16	Assay	99.65	%
17	Purity	99.9999	%

Note: The above are our company's regular specifications. If your company has special requirements, we can customize standards for you.