

# Methyltrichlorosilane (MTCS/M<sub>1</sub>)

**Product Name:** Methyltrichlorosilane (MTCS)

**Molecular Formula:** CH<sub>3</sub>SiCl<sub>3</sub>

**Molecular Weight:** 149.5

**CAS No.:** 75-79-6

**UN No.:** 1250

**Product Standard:** GB/T 20434-2006

**Physical and Chemical Properties:**

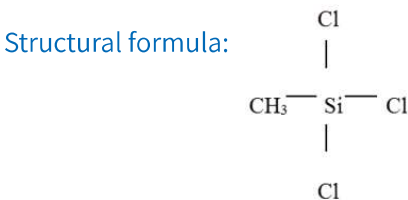
Flash Point: -9°C (Closed cup)	Relative Density (water=1): 1.28
Melting Point: -90°C	Relative Vapour density (air=1): 5.2
Boiling Point: 66°C	Vapour Pressure: 17.9kPa (at 20°C)
Auto-ignition Temperature: 490°C	PH: Reacts with water to produce hydrogen chloride.

Explosion Limits Lower[%(V/V)]: 7.6

Explosion Limits Upper[%(V/V)]: 20

Water Solubility: Reaction

**Appearance:** Colorless transparent liquid.



**Technological Index:**

Item	Index
Content of Methyltrichlorosilane/% ≥	99.0
Content of Trimethylchlorosilane/% ≤	0.1
Content of Silicon Tetrachloride/% ≤	0.1

**Properties and Uses**

It is inflammable, explosive and toxic. It is a base material for manufacturing Methyl Triethoxysilane, Methyl Trimethoxysilane, silicone resins, specific paints, waterproof agent for construction and anti-collapse agent for drilling oil well (Methyl Silicate Sodium).

**Package, Storage and Handling**

Steel drum, 230kg/drum or Plastic Drum, 200kg/drum or ISO TANK. Storage at ventilate and dry place and prevention from water, heat and fire; It should be kept away from oxidant, acid and alkali. Handling according to hazardous substances and prevention from exposing to sunlight and rain. Be careful when loading and unloading to avoid damages of the package.

**Chemical Stability:** Stable in closed containers under specified storage and handling conditions.

**Conditions to Avoid:** Incompatible materials, any sources of ignition or heat, exposure to moist air or water, electrical sparks.

**Incompatibilities with Other Materials:** Strong oxidizing agents, alcohols, caustics, ammonia, water. Reacts violently with water to produce hydrogen chloride. Attacks many metals like aluminium and magnesium.

**Hazardous Decomposition Products:** The substance decomposes on heating producing toxic and corrosive fumes including hydrogen chloride, phosgene, and chlorine compounds. Reacts violently with water to produce hydrogen chloride.

**Hazardous Polymerization:** Will not occur.