

## Methyldichlorosilane (MDCS/MH)

**Product Name:** Methyldichlorosilane (MDCS)

**Molecular Formula:** CH<sub>3</sub>HSiCl<sub>2</sub>

**Molecular Weight:** 115

**CAS No.:** 75-54-7

**UN No.:** 1242

**Product Standard:** T/FSI 021-2019

### Physical and Chemical Properties:

**Flash Point:** < -26°C (Closed cup)

**Melting Point:** -92°C

**Boiling Point:** 41°C

**Relative Density (water=1):** 1.1

**Relative Vapour density (air=1):** 3.97

**PH:** Reacts with water to produce hydrogen chloride.

**Auto-ignition Temperature:** 290°C

**Water Solubility:** Reaction

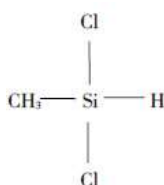
**Explosion Limits Lower [% (V/V)]:** 6.5

**Explosion Limits Upper [% (V/V)]:** 55

**Vapour Pressure:** 47.1 kPa (at 20°C)

**Appearance:** Colorless, transparent liquid with strong pungent smell

**Structural formula:**



### Technological Index:

| Item                                      | Index |
|---|-------|
| Content of Methyldichlorosilane/% $\geq$  | 99.50 |
| Content of Dimethylchlorosilane/% $\leq$  | 0.30  |
| Content of Silicon Tetrachloride/% $\leq$ | 0.20  |

### Properties and Uses

It is inflammable, explosive and toxic. It is mainly used to manufacture hydrogen silicone oil, methylhexenyl monomer and aminosilane, etc.

### Package, Storage and Handling

Steel drum, net weight 200kg/drum. Storage at ventilated 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:** Oxidizing agents, base, water, potassium permanganate, lead (II) oxide, copper oxide or silver oxide. Attacks many metals in presence of water. (Reacts violently with water to produce hydrogen chloride. Reacts in the presence of potassium permanganate, lead (II) oxide, copper oxide or silver oxide, causing fire and explosion hazard.)

**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. The substance decomposes on contact with bases, forming flammable/explosive gas (hydrogen).

**Hazardous Polymerization:** Will not occur.