

浙江中天氟硅材料有限公司

Zhejiang Zhongtian fluorine silicon material Co., Ltd.

Metryltrichlorosilane (M1)

Name: Metryltrichlorosilane
Molecular formula: CH₃SiCl₃
Molecular weight: 149.48

Structural formula: Cl | CH₃—Si—Cl

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 Product standard: Enterprise Standard Q/ZTFG 003-2014 Metryltrichlorosilane

 Appearance: Colorless transparent liquid with sharp odour, without mechanical impurity, hydrolysable with air moisture.

PH Value: — Melt Point (°C): -77.5

Specific Gravity (Water⋅s=1): 1.28 Boiling Point (°C): 66.4

Vapor Density (Air·s=1): 5.17 Vapor Pressure (KPa): 20.0/25℃

Ignition Temperature ($^{\circ}$): 408 Flash Point ($^{\circ}$): -9

Upper Limit of Explosion [%(V/V)]: 11.9 Lower Limit of Explosion

[%(V/V)]: 7.2

Dis-solubility: soluble in benzene, ether etc.

Technical indexes

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Item	Premium grade	First grade
Mass Fraction of	99.5	99.0
Methyltrichlorosilane /% ≥		
Mass Fraction of	0.1	0.3
Trimethychorosilane /% ≤		
Mass Fraction of	0.1	0.2
Dimethyldichlorosilane /% ≤		
Silicon Tetrachoride /% ≤	0.1	0.2

- Applications: The product is used for cross-linked agent of methytriethoxysilane, methyltrimethoxysilane etc., silicone resin, special coating, construction water-proof agent and collapse resistant agent (methyl sodium silicate) used in drilling wells on oil field.
- Hazard characteristics: Inflammation and explosion will arise when it meets naked fire, high heat or oxidant. And it will decompose with exothermic heat and poisonous caustic smoke when it is heated or encounters water. Interior pressure in the vessel increases leading to the danger of splitting and explosion when in meets high heat. It is of causticity.
- Stability: Stable
- Condition to avoid being contacted: Humid air
- Banned articles: Strong oxidant, Strong alkali, Water, Strong acid.
- Combustion (decomposition) products: Carbon monoxide, Carbon dioxide, Monox, Hydrogen chloride, Phosgene
- Package storage and transportation: It should be packed in 200L iron bucket and be stored in a shady, cool and ventilated storehouse. It should be kept



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away from kindling; temperature in the storehouse above 30°C is not suitable. Avoid direct sunlight. Air proof package is required without contact with air. And it should be put and stored separately from oxidant, acid, and alkali. The installation of lighting and ventilation in the storehouse should be explosion-proof. Switches are located in outside the storehouse. Corresponding varied and quantitative fire fighting equipment should be equipped. Check regularly to make sure whether there is a leakage phenomenon. Operate and handle in nitrogen gas. When conveying, take care of loading and unloading to avoid damages on package and vessels. A regulated route is required for transportation without changing the route and staying on the midway.