

Dimethylcyclosiloxane (DMC)

Product Name: Dimethylcyclosiloxane (DMC)

Molecular Formula: $[(CH_3)_2SiO]_n$, n=3~7

CAS No.: 69430-24-6

Product Standard: GB/T 20436-2006

Physical and Chemical Properties: Flash Point: 55°C

Relative Density (water=1): 0.956

Appearance: Colorless transparent oily liquid

Technological Index:

Item	Index
Chroma/ Platinum-cobalt scale/ Hazen unit \leq	10
Refractive index n_D^{20}	1.3960~1.3970
Content of Dimethylsiloxane cyclics mixture/% \geq	99.80
Content of Hexamethyldisiloxane/% \leq	0.005
Acidity (According to HCl) /% \leq	0.001

Properties and Uses

It is colorless, inflammable, and can not dissolve in water, but dissolve in organic solvents such as benzene, etc. It can be used to synthesize organic silicon polymer by acid or alkali catalysis to manufacture silicone oil, silicone rubber, etc.

Package, Storage and Handling

Steel drum, net weight 190kg/drum or International Bulk Container, net weight 950kg/IBC or ISO TANK. Store in a cool, dry, well-ventilated area and keep away from oxidant, acid and alkali. The storage area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment. Handling according to hazardous substances. 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.

Incompatibilities with Other Materials: Strong oxidizing agents, acids, bases.

Hazardous Decomposition Products: In case of a fire, oxides of carbon, hydrocarbons, silicon oxide, fumes, and smoke may be generated by thermal decomposition or combustion.

Hazardous Polymerization: May occur.