

# Technical Data Sheet

## PRODUCT INTRODUCTION

- Name: Dimethylsiloxane cyclics mixture
- CAS No.: 69430-24-6
- Description of danger: UN No.1993
- Molecular formula:  $[(CH_3)_2SiO]_n$  n=3-7
- Product standard: Enterprise Standard Q/ZTA2-2007
- Appearance: Colorless transparent oily liquid.

PH Value: Neutral

Melt Point (°C): --

Specific Gravity (Water:s=1): 0.95-0.97

Boiling Point (°C):  $\geq 135$

Vapor Density (Air:s=1): --

Octanol / water distribution coefficient: --

Ignition Temperature (°C): --

Flash Point (°C): 56-57.8

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

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

Dis-solubility: insoluble in water, soluble in organic such as benzene etc.

- Technical indexes

Item	Indexes	
	Premium grade	First grade
Chroma/platinum-cobalt chroma No./Hazen /% $\leq$	10	10
Density@20°C, g/cm <sup>3</sup>	0.950-0.970	0.950-0.970
Mass Fraction of Octamethylcyclotetrasiloxane /% $\geq$	90	85
Mass Fraction of hexamethyldisiloxane /% $\leq$	0.01	0.01
Chloride(count by Cl <sup>-</sup> )/% $\leq$	0.0005	0.0005
Refractive index $n_D^{20}$	1.3960-1.3970	1.3960-1.3970
Water content/% $\leq$	0.01	0.05
Viscosity@25°C, mm <sup>2</sup> /s	2.10-2.50	$\leq 3.50$
PH Value	7	7
Molecular weight (By flash polymerization)/ten thousand $\geq$	60	60
Cyclosiloxane/% $\geq$	99.50	99.50

- Applications: The primary material of high mol molecular weight linear or crosslinking polysiloxane products. It can produce three types of polymer products including silicone oil, silicone rubber and silicone resin.
- Hazard characteristics: It is flammable, it will produce carbon oxide and silicon dioxide when it burns and will decompose and produce formaldehyde when it heated to 200-300°C. Electrostatic force accumulates and may ignite inhalator. Hidden fire danger can be avoided by earth or inert gas protection.
- Stability: Stable
- Condition to avoid being contacted: --
- Banned articles: Oxidant

- Decomposition products: silicon dioxide, Carbon dioxide and minimum incomplete combustion carbide and formaldehyde.
  - 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 away from kindling and heat source, temperature in the storehouse above 30°C is not suitable. It should be put and stored separately from oxidant, acid, and alkali. Corresponding varied and quantitative fire fighting equipment should be equipped. Mechanical equipment and tools which are easy to produce sparks are prohibited to be used. When conveying, take care of loading and unloading to avoid damages on package and vessels.
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