

# Manta FE10

## Epoxy Terminated Silicone Fluid

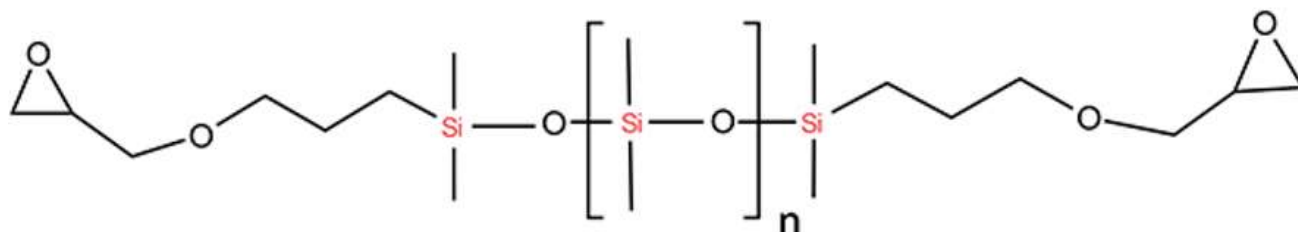
### Description

Siloxanes and Silicones, di-Me, 3-(2-oxiranylmethoxy)propyl group-terminated; Terminated epoxy silicone oil is an epoxy-terminated linear polydimethylsiloxane. Because the epoxy group has strong reactivity, it can react with other functional groups and can be used as a modifier, additive, and diluent for various resins. It is widely used in textile, leather, and ink industries. In terms of textile finishing, terminal epoxy silicone oil is the most important raw material for ternary copolymer silicone oil.

### Typical Physical Properties

Manta code:	FE10-1K	FE10-9K	FE10-11K
Chemical Name:	Bis(3-glycidoxypropyl)-terminated polymethyldisiloxane		
CAS No.:	102782-97-8		
Appearance:	Colorless transparent liquid		
Density(25°C, g/cm <sup>3</sup> )	0.98	0.969	0.97
Refractive Index(25°C)	1.417	1.4054	1.4049
Viscosity(25°C, mm <sup>2</sup> /s)	15-17	100-300	200-400
Volatile(mmol/g)	/	≤10.0	≤10.0
Epoxy Value	2.0	0.22	0.18

### Chemical Structure



### Applications

Manta FE10 is used in:

1. By reacting with the epoxy group contained in the terminal group, the silicone properties are introduced into the organic resin, especially to toughen the epoxy resin, improve the electrical properties, reduce internal stress, etc.

2. An important intermediate raw material of silicone block polymer, it is the key raw material of a new generation of terpolymerized silicone oil softener for textile printing and dyeing. Its finished products overcome the yellowing, non-hydrophilicity and breakage of current ordinary amino silicone oil. There are three major disadvantages: Yellowing, not hydrophilic, demulsification and sticky roller.
3. Excellent release effect, it is an ideal material for epoxy resin internal and external release agents.
4. It has good affinity for fibers and fillers, and has a similar effect to silane coupling agents, which can increase the interfacial bonding force and improve the strength of composite products.
5. A broad-spectrum tackifier for addition-type silicone rubber, which is very effective for tackifying aluminum and glass.

### Packaging

In 20kg pail, 200kg drum and 1000kg IBC.

### Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is min. 6 months.

### Contact Information

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