



## Technical Data Sheet

# Silaplane™ Mono-terminal Reactive Siloxanes FM-07series

### Features and benefits

- Narrow polydispersity and low level of chemical impurities
- Mold release property
- Water/Oil repellency
- Gas permeability (Oxygen, CO<sub>2</sub>, CH<sub>4</sub>, etc.)

### Application

Si Hydrogel Contact Lenses, Functional Paints, Coating

### Description

JNC's mono-terminal Silaplane™ products are reactive toward a variety of compounds and surfaces enabling chemical and physical changes to chemicals, particle and larger surface structures.

### Structure

| Grade Name  | Group       | Chemical structure |
|-------------|-------------|--------------------|
| FM-07series | Methacyloxy |                    |
| TM-0701T    | Methacyloxy |                    |

### Typical Properties

|                                           | Units              | FM-0711      | FM-0721      | FM-0725      | TM-0701T     |
|-------------------------------------------|--------------------|--------------|--------------|--------------|--------------|
| Molecular Weight ( <i>M<sub>n</sub></i> ) |                    | 1,000        | 5,000        | 10,000       | 423          |
| Appearance                                |                    | Clear Liquid | Clear Liquid | Clear Liquid | Clear Liquid |
| Specific Gravity (25 °C)                  |                    | 0.96         | 0.97         | 0.97         | 0.91         |
| Viscosity (25 °C)                         | mm <sup>2</sup> /s | 7-13         | 54-79        | 150-260      | 2.9-6.1      |

## Recommended usage

Silicone modified (meth)acrylic polymers can be synthesized by mixing and heating the FM-07 series with a solvent, (meth)acrylic monomer, and polymerization initiator.

## Packaging

|                       | FM-0711                    | FM-0721                    | FM-0725                    | TM-0701T            |
|-----------------------|----------------------------|----------------------------|----------------------------|---------------------|
| Package (Can or Drum) | Net 1 kg,<br>16 kg, 180 kg | Net 1 kg,<br>16 kg, 180 kg | Net 1 kg,<br>16 kg, 180 kg | Net 1 kg,<br>16 kg, |

## Reactive groups

Effective for modification of (meth)acrylic resins.

## Solubility (solvent)

| Solvent             | FM-0711 | FM-0721 | FM-0725 | TM-0701T |
|---------------------|---------|---------|---------|----------|
| Toluene             | ✓       | ✓       | ✓       | ✓        |
| Acetone             | ✓       | ✓       | —       | ✓        |
| THF                 | ✓       | ✓       | ✓       | ✓        |
| Butyl acetate       | ✓       | ✓       | ✓       | ✓        |
| DMAC                | —       | —       | —       | —        |
| PGMEA               | ✓       | ✓       | —       | ✓        |
| Methyl methacrylate | ✓       | ✓       | ✓       | ✓        |
| TMPTA               | —       | —       | —       | ✓        |

✓ ; Soluble, — ; Insoluble

## Conditions for storage

Please keep containers tightly closed in a dry, cool, and well-ventilated place.

## Precautions for safe handling

SAFETY INFORMATION IS INCLUDED IN SAFETY DATA SHEET. READ SAFETY DATA SHEET AND CONTAINER LABELS, BEFORE USING PRODUCTS.

**Contact Information**  
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<https://www.jnc-corp.co.jp/english/product/p-material/silicone.html>

Scan QR code for JNC  
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