Silaplane[®] Bi-terminal Reactive Siloxanes Product Line Overview

JNC Corporation has more than 40 years history in the development and commercialization of Silicon related materials, such as Silaplane® reactive siloxanes.



JNC's Silaplane® products are reactive polydimethylsiloxane (PDMS) based polymers offered a select molecular weights and reactive groups. These reactive silicone materials offer the addition of silicone type properties to non-Silicone materials in a variety of industries including electronics, semiconductors, automotive, biotech, healthcare, and clean energy applications.

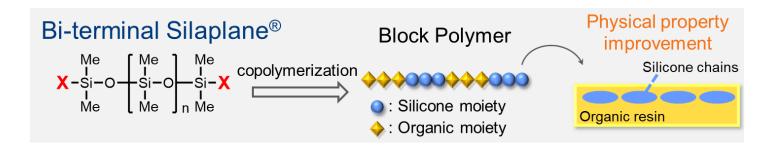
JNC's bi-terminal Silaplane[®] products copolymerize with various monomers and polymers to form block copolymer. Physical properties can be improved by introducing siloxane chains into the organic resin.

Product Features:

- Improve physical properties of organic resins
- React with various organic compounds (Urethane, Urea, Epoxy and Acrylic resin, Polyester, Polyamide, Polyimide)
- High affinity for organic resin especially silicone resin

Product Benefits:

- Flexibility
- Gas permeability (Oxygen, CO₂, CH₄, etc.)
- Heat resistance
- Weather resistance
- Impact resistance



Bi-terminal Silaplane® Product Table:

Grade	Group	Chemical structure	Molecular Weight (Mn)	Specific Gravity (25 °C)	Viscosity (mm²/s)
FM-3311	Amino	$\begin{array}{c} \text{Me} \\ \text{H}_2\text{N} \\ & \text{Si-O} \\ & \text{Me} \\ & \text{Me} \end{array} \begin{array}{c} \text{Me} \\ \text{Si-O} \\ & \text{Si-O} \\ & \text{Me} \\ & \text{Me} \end{array} \begin{array}{c} \text{Me} \\ \text{I} \\ \text{NH}_2 \\ & \text{NH}_2 \end{array}$	1,000	0.95	11-15
FM-3321			5,000	0.97	90-150
FM-3325			10,000	0.97	200-400
FM-4411	Hydroxy	$\begin{array}{c} \text{Me} \\ \text{No} \\ \text{No} \\ \text{Ne} \end{array} \begin{array}{c} \text{Me} \\ \text{Ni} \\ \text{Ne} \\ \text{Ne} \end{array} \begin{array}{c} \text{Me} \\ \text{Ni} \\ \text{Ne} \\ \text{Ne}$	1,000	0.97	30-40
FM-4421			5,000	0.98	100-125
FM-4425			10,000	0.97	250-400
FM-7711	Methacryloxy	$\begin{array}{c} \overset{\circ}{\underset{\text{Ni-O}}{\bigvee}} \overset{\text{Me}}{\underset{\text{Ni-O}}{\bigvee}} \overset{\text{Me}}{\underset{\text{Ni-O}}{\bigvee}} \overset{\text{Me}}{\underset{\text{Ni-O}}{\bigvee}} \overset{\circ}{\underset{\text{Ni-O}}{\bigvee}} \overset{\circ}{\underset{\text{Ni-O}}{\overset{\circ}}{\underset{\text{Ni-O}}{\bigvee}} \overset{\circ}{\underset{Ni-O}}{\overset{\circ}{\underset{Ni-O}}} \overset{\circ}{\underset{Ni-O}} \overset{\circ}{\underset{Ni-O}} \overset{\circ}{\underset{Ni-O}}$	1,000	0.98	14-20
FM-7721			5,000	0.98	30-100
FM-9925A ⁽¹⁾	Silanol	$\begin{array}{c} \text{Me} & \text{Me} \\ \text{IO-Si-O} & \text{Si-O} \\ \text{Ne} & \text{IMe} \end{array}$	10,000	0.97	110-210

The values in the table are typical values, not the product standard values.

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Scan QR code for JNC Silicone products.



⁽¹⁾ Developmental Product: Samples, data, shipments, etc. may be limited.