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TECHNICAL DATA SHEET

Silmer[®] NCO C50
Isocyanate Functional Pre-Polymer

DESCRIPTION

Silmer[®] NCO C50 is a high molecular weight tri-functional isocyanate silicone pre-polymer.

TYPICAL PROPERTIES

Appearance	Clear to cloudy liquid
Colour, Gardner	1
Solid Content, %	100
Solubility in Water (1% & 10%)	Insoluble, insoluble
Solubility in Silicone Fluid, 350cps (1% & 5%)	Insoluble, insoluble
NCO Content, %	3.3%
Specific Gravity (25°C)	0.98
Viscosity, cps (25 °C)	1,800
Molecular Weight, gm/mol	12,400

APPLICATION & USES

Silmer NCO C50 can be co-reacted into various alcohol and amine based polymers for coatings, plastics, resin and other applications to incorporate a silicone moiety into a polymer structure. The reaction of **Silmer NCO C50** and an alcohol based polymer will result in a silicone urethane polymer. The reaction of **Silmer NCO C50** and an amine based polymer will result in a silicone polyurea polymer.

When modifying a polymer with silicone one typically achieves increased elongation, improved flexibility, increased impact resistance - especially at cold temperatures, increased slip and softness. Increased cross-link density of the tri-functional **Silmer NCO C50** will increase the hardness over the linear **Silmer NCO Di-xx** series products.

SHELF LIFE

When stored in the original, unopened containers between 10 and 40°C, **Silmer NCO C50** has a shelf life of 12 months from date of manufacture.

PACKAGING

Silmer NCO C50 is supplied in 20kg pails and 200kg drums.

LEGAL DISCLAIMER

Siltech Corporation believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Siltech Corporation, however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.

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