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TECHNICAL DATA SHEET

**Silmer<sup>®</sup> EPC C50**

Epoxide Functional Silicone Pre-Polymer

**DESCRIPTION**

**Silmer<sup>®</sup> EPC C50** is a high molecular weight silicone pre-polymer with cycloaliphatic epoxide groups. It is used in photoinitiated cationic cured systems and to modify various polymers by providing improved surface and physical properties.

**TYPICAL PROPERTIES**

Appearance	Clear liquid
Viscosity at 25°C, cps	450
Active Content, %	100
Molecular Weight, gm/mol	11,800
Equivalent Weight, gm/mol	3,900
Epoxide, %	1.10

**APPLICATION & USES**

**Silmer EPC C50** is UV curable in presence of cationic photoinitiators and can be used in UV cured coatings, plastics, resins and other applications. As a pendant, multi-functional reactive polymer **Silmer EPC C50** tends to act as a cross-linker, increasing hardness rather than as an extender.

**Silmer EPC C50** can be co-reacted into various alcohol, organic acid, and amine based polymers or films to incorporate a permanent silicone moiety into the polymer structure.

Benefits of incorporating **Silmer EPC C50** include provide better slip, antiblocking, mar resistance, surface smoothness, flexibility, heat resistance and hydrophobicity.

**SHELF LIFE**

When stored between 10°C and 40°C in the original unopened container, **Silmer EPC C50** has a shelf life of 36 months from the date of manufacture.

**PACKAGING**

**Silmer EPC 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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