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TECHNICAL DATA SHEET

**Silmer® ACR Di-50 TF**  
Silicone Acrylate Functional Pre-polymer

**DESCRIPTION**

**Silmer® ACR Di-50 TF** is a 100% active high molecular weight silicone acrylate fluid. It is used to give permanent slip and mar resistance to UV-curable coatings systems. It is also used to modify acrylate polymers to improve its surface and physical properties.

**TYPICAL PROPERTIES**

Appearance	Clear to slightly hazy liquid
Colour, Gardner	1
Viscosity at 25°C, cps	250
Active Content, %	100
Water Solubility (1 % & 10%)	Insoluble
Specific Gravity (25°C)	0.98

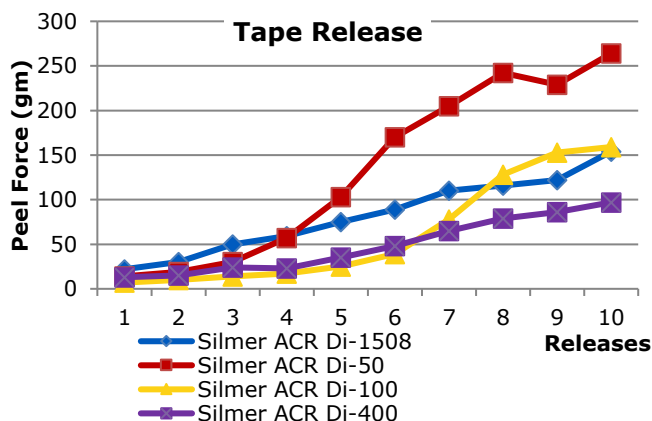
**APPLICATION & USES**

**Silmer ACR Di-50 TF** can be co-reacted into acrylate polymers and UV cured systems for coatings, plastics, resins and other applications to incorporate a silicone moiety into the polymer structure. When co-reacted during the polymerization stage, **Silmer ACR Di-50 TF** improves the surface and physical properties of the polymers. These benefits include improved slip, antiblocking, mar resistance, surface smoothness, flexibility and hydrophobicity. The acrylate functionality in **Silmer ACR Di-50 TF** gives a permanent binding into the matrix of the polymers. It also enables the product to be used in UV cured systems.

The typical recommended amount of **Silmer ACR Di-50 TF** for polymer modification ranges from 2.0-5.0%. As an additive in UV curing system, the recommended amount is 0.1-2.0%.

**APPLICATIONS DATA**

A proprietary acrylate functional UV cured coating was evaluated with 1.5% of four Silmer ACR products to show their relative release strengths. The coatings were cured and evaluated for peel force for multiple applications of packing tape. The results are shown at right. Based on this **Silmer ACR Di-50 TF** is expected to provide low tape release.



**SHELF LIFE**

When stored in the original, unopened containers between 10 and 40°C, **Silmer ACR Di-50 TF** has a shelf life of 24 months from date of manufacture.

**PACKAGING**

**Silmer ACR Di-50 TF** 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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