



SILTECH CORPORATION
 225 Wicksteed Avenue
 Toronto, Ontario, Canada, M4H 1G5
 (416)424-4567 (Tel) (416)424-3158 (Fax)

TECHNICAL BULLETIN

Siltech® Leather Treatments

DESCRIPTION

Siltech has a broad portfolio of products for use in the finishing or processing of natural or synthetic leather goods.

The product type used for leather varies from dispersions of high molecular weight silicones and/or resins to silicone surfactants. These additives are multi-functional so that the material used to increase wetting is likely to also impact feel. Therefore, the highlighted expected properties herein are often not the key benefit to any individual user.

Likewise, many of these products can be used in water or solvent based systems or with natural or synthetic leathers.

These materials can provide softness, feel, lubricity, anti-blocking, wetting, leveling, or repellency to the final product. They can also be used as processing aids to improve lubricity and release.

Comparison of Products

	Product	Water Reducible	Reactive with PU	Gloss	Softness	Leveling	Anti-blocking	Water Repellent	Stain Repellent
Softness	Silamine® DG-50	no	yes	some	high	none	moderate	high	low
	Siltech® E-2150-30	yes	yes	some	very high	none	moderate	low	moderate
	Siltech C-4405	no	no	matte	moderate	none	high	high	low
Wetting & Leveling	Siltech C-20	yes	yes	low	moderate	high	low	none	moderate
	Siltech L-10	yes	yes	moderate	moderate	high	moderate	low	none
	Siltech L-25	yes	yes	high	high	low	high	moderate	high
	Silsurf A008-UP	yes	yes	low	none	very high	none	none	none
Lubricity & Abrasion Resist	Siltech T-81	no	no	none	moderate	in solvent	high	high	none
	Siltech T-12	yes	no	low	low	moderate	high	low	none
	Siltech T-15	yes	no	moderate	some	moderate	high	none	none
	Siltech C-442	yes	no	low	moderate	low	high	None	none

TYPICAL PROPERTIES

Silamine DG-50 is 50% solution of an aminosilicone in mineral spirits. It is primarily used as a softener in solvent based natural or synthetic leather and provides a characteristic feel. It also provides gloss, anti-blocking and water repellence

Siltech C-4405 is a water reducible dispersion of high molecular weight silicone polymers designed to give a characteristic feel mainly to natural leather. It also often provides a matting affect as well as abrasion resistance, anti-blocking and water repellence.

Siltech E-2150-30 is a film-forming emulsion of an amino silicone. It is designed to be used in water-based synthetic leather and gives a barrier coating resulting in a very soft, powdery feel as well as some stain resistance, gloss, anti-blocking and abrasion resistance.

Siltech C-20 and **Siltech T-15** are water and solvent soluble wetting and leveling agents for natural and synthetic leathers. They will often give moderate softness, lubricity and abrasion resistance as well.

Siltech L-10 and **Siltech L-25** are water and solvent reducible PU reactive materials designed as wetting agents for synthetic leather. The L-25 gives a much higher amount of softness, lubricity, stain repellence, anti-blocking and abrasion resistance.

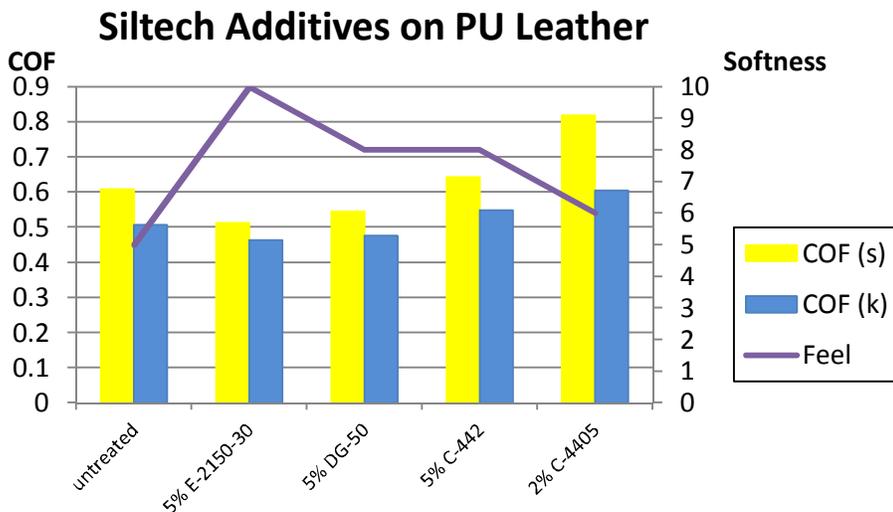
Silsurf A008-UP is a super-wetting agent and is designed for usage in water based systems at about 0.2% actives, but can also be used in solvent-based systems. This agent lowers surface tension and provides increased penetration and maximum wetting and leveling.

Siltech T-81, **Siltech C-442** and **Siltech T-12** are water and solvent reducible modified silicones designed to provide lubricity, abrasion resistance and anti-blocking to natural and synthetic leather products. **Siltech T-12** is especially effective on synthetic leather. These are non-reactive with PU.

USES AND APPLICATION

These products are generally added at 0.05-1% when used as a surface coatings additive and 2-5% use level when used as a pre-polymer. These can normally be added at any point in the process. Pre-dilution of the as received product will lower the viscosity and facilitate dissolution and so is often desired.

Below is softness and COF data on synthetic PU leather. The products were taken up in water or IDD, Sprayed on, dried overnight and evaluated.



SAFETY

Before handling, read the Material Safety Data Sheet and container label for safe use, physical and health hazard information.

PACKAGING

Siltech products are available in 20kg and 200kg containers.

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.

SILTECH, **SILSURF**, and **SILAMINE** are trademarks of Siltech Corporation, Toronto, Ontario, Canada.