



TECHNICAL BULLETIN

TAYCHEM SILSOFT 220E

Silicone Softener Emulsion

Description:

TayChem Silsoft 220E is a nonionic micro emulsion of a hydrophilic, self-dispersing, polyether-amino-functional silicone fluid.

Properties:

By improving hand, and because of its non-hydrophobic (and on some types of fiber, hydrophilic) nature, TayChem Silsoft 220E considerably improves the wear comfort of textiles. The hydrophilic properties are the result of the special orientation of TayChem Silsoft 220E on the fiber surface. This allows unrestricted moisture transport within the fabric, together with the excellent hand that is generally associated with high-quality, silicone textile softeners. Due to the surface-oriented, silk-like, and supple softness effect, TayChem Silsoft 220E is particularly suitable for light woven goods where hydrophilic properties are of importance.

TayChem Silsoft 220E bonds more strongly to the fiber surface than glycol- and quat- functional polysiloxanes. This leads to better exhaustibility and wash resistance.

Application:

TayChem Silsoft 220E is used for hydrophilic treatment of fibers and textiles of all kinds. On hydrophilic substrates, such as cellulosics, the hydrophilic properties are not usually affected, whereas hydrophobic substrates, such as polyesters, usually experience a clear improvement in wetting properties.

TayChem Silsoft 220E provides woven goods and knit wear with a silk-like, soft, full-bodied, bulky, supple, and smooth hand.

When applied under normal conditions, TayChem Silsoft 220E only has a slight effect on whiteness. It does not generally affect the color shade or fastness of colored goods.

TayChem Silsoft 220E is used for padding and in the exhaust process and can also be used on its own or together with organic fabric softeners, polyethylene waxes, and other finishing agents. The compatibility should be tested on a case-by-case basis.

Because of its cationic structure, TayChem Silsoft 220E has limited compatibility with anionic auxiliaries such as optical brighteners. Compatibility tests should be carried out before it is used together with other chemicals.

Typical Properties:

Property	Characteristic
Appearance	Clear, Slightly Amber Micro Emulsion
Solids Content (%); Microwave Oven	Approximately 20
pH (5% In Water)	Approximately 5-6
Ionic Character	Nonionic
Note: These figures are intended as a guide and should not be used in preparing specifications.	



Processing:

For padding, we recommend using 10 to 30 g/l of TayChem Silsoft 220E.

For the exhaust process, 1% to 3% TayChem Silsoft 220E is used, based on the weight of the textile.

Through blending with TayChem Silsoft 220E, the hand can be changed to your preference while only slightly changing the hydrophilic properties of the substrate.

Storage Stability:

TayChem Silsoft 220E has a shelf life of at least six {6} months if stored in tightly-closed, original containers at 25°C. The "best use before end date" of each batch is shown on the product label.

If the material is kept beyond the recommended shelf life denoted on the product label, it is not necessarily unusable, but quality control should be performed on the properties relevant to the application.

Safety Instructions:

Comprehensive instructions are given in the corresponding Material Safety Data Sheet. This information is available upon request from TayChem Industries, Ltd.

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