

# StarSil<sup>™</sup> PD 383

# Water Based Silicone Defoamer Emulsion

#### **Product Description**

StarSil<sup>TM</sup> PD 383 is a low viscosity, "free rinsing" highly efficient water based silicone-antifoam emulsion. It was especially developed for use in a wide range of industrial applications ranging from pulp processing, textile dyeing, and waste water treatment. StarSil<sup>TM</sup> PD 383 has significant foam knock down and excellent sustaining antifoam power.

#### **Special Properties**

- Free rinsing
- Highly effective silicone defoamer
- Long-lasting antifoam properties
- Nonionic
- Dilutes easily in water

#### **Typical Physical Properties\***

Appearance	.milky-white liquid
Ionicity	.nonionic
pH (100%)	8.0 +/- 1.0
% Solids	30.0 +/- 2.0
Solubility	.dispersible in water

\* These items are provided as general information only. They are approximate values and are not considered part of the product specifications.

### Application

StarSil<sup>™</sup> PD 383 acts primarily as an antifoam agent and drainage aid and can be added at various stages during the manufacturing process. StarSil<sup>™</sup> PD 383 is mainly applied to pulp washing and screening processes, but is also effective during bleaching and in effluent treatment.

StarSil<sup>™</sup> PD 383 can also be used as a formulation base in Textile dyeing due to its free rinsing properties. StarSil<sup>™</sup> PD 383 rinses cleaner and does not have a detrimental effect on lightfastness. StarSil<sup>™</sup> PD 383 is extremely shear stable, even at very low liquor ratios.

StarSil<sup>TM</sup> PD 383 is dilution stable with proper back thickening. StarSil<sup>TM</sup> PD 383 can be used undiluted. However, to achieve better dispersion a dilution is recommended. We recommend a pre-dilution of 1:1 to 1:3 in cold water. The diluted emulsion, however, should be processed within a few days.

## **Dilution Procedure**

It is recommended to used a thickener (rheological stabilizer) when diluting StarSil PD 383. The following products are recommended:

Alcogum 1370 (acrylic) Cekol 30 (carboxymethyl cellulose) Kelzan S (xantham Gum)

Target Viscosity of Dilution should be in the following range (final viscosity is always dependent on the application and handling of the end use product): 800 to 5000 centipoise It is always recommended that you make your thickened water solution and then add the StarSil<sup>TM</sup> PD 50 to this solution (or vice versa).

#### Storage

StarSil<sup>™</sup> PD 383 has a shelf life of at least six months from the date of delivery note if stored in tightly-closed containers at temperatures not exceeding 25°C (77°F) and protected against freezing. Emulsions showing signs of creaming should be agitated before use to assure uniform consistency. Continued storage beyond the designated shelf life does not necessarily mean the material cannot be used. However, renewed testing of the most important properties is imperative.

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