



78010 Surfynol® 61

Introduction:

Surfynol® 61 surfactant is a multifunctional surface-active agent.

Due to its volatile nature, Surfynol® 61 surfactant evaporates from a system under use conditions. Therefore, it is useful in applications, such as silicon water and glass cleaning, where residual surface activity or contamination is undesirable.

Features:

Surface Tension

The surface tension reduction properties of Surfynol® 61 surfactant are shown below.

Surfynol® 61 Surfactant, wt %	Dynes / cm (20°C)
0.90 (solubility limit)	34.3
0.10	56.4

Wetting Power

The wetting time of Surfynol® 61 surfactant was determined by the Draves Test. A five-gram unscoured cotton skein and a three-gram hook were used. The surfactant blend was dissolved in IPA; water was added while stirring. (Ammonia may be used to replace part of the water, if desired). The results of this test and comparative evaporation rates are shown in Table 1. These results indicate that Surfynol 61 surfactant provides the formulator with a good wetting agent that volatilizes out of the system, leading to some important benefits, as described here.

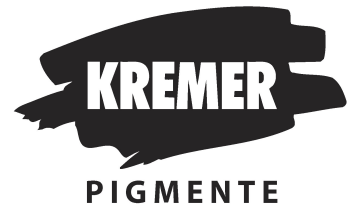
Physical Properties

Appearance:	clear, colorless liquid
Odor:	camphoric
Percent active:	100 %
Boiling range:	150-151°C
Freezing point:	-68°C (sets to glass)
Specific gravity, 20°/20°C:	0.8545
Refractive Index n 20/D:	1.4353
Weight/Gallon @ 20°C:	7.2 lb
Flash Point, T.O.C.:	135°F
Molar mass:	126 g/mol
Solubility in water @ 20°C:	0.9 % by wt

Solubility in organic solvents:

Miscible with acetone, benzene, carbon tetrachloride, cellosolve, cyclohexanone, diethylene glycol, ethanol, ethyl acetate, kerosene, methyl ethyl ketone, mineral oil, mineral spirits, monoethanol-amine, Solox, soybean oil, Stoddard solvent, and V.M.& P. naphtha

Surfynol® 61 Surfactant, wt%	Sinking Time, sec (20°C)
0.10	< 300
0.50	8
0.75	instantaneous
0.90 (solubility limit)	instantaneous



Comparative Evaporation Rates (n-butyl acetate = 100):

Surfynol® 61 Surfactant	44
Cellosolve	32
Butyl Cellosolve	6

Industrial Maintenance Cleaners:

In industrial maintenance coatings Surfynol® 61 surfactant has demonstrated the ability to reduce internal and external microfoam as well as enhance gloss and improve substrate wetting.

Miscellaneous Cleaners:

Surfynol® 61 surfactant provides excellent substrate wetting for various aqueous cleaning formulations, such as glass and other hard surface cleaners and textile cleaners. Due to its volatility Surfynol® 61 surfactant evaporates after providing the required substrate wetting. Therefore Surfynol® 61 is not present to cause problems such as streaking and soiling.

Inks:

Due to its volatility, Surfynol® 61 surfactant provides excellent wetting characteristics on polymeric films such as polyethylene and polypropylene. Upon evaporation, no residual surface activity is present to interfere with trapping or cause water sensitivity.