



CoatOSil* 1221 Surfactant

Product Description

CoatOSil 1221 surfactant is a non-fluorine based organomodified siloxane surfactant with the unique superwetting properties in waterborne coatings for spray applications, high-speed roll applications and hard-to-wet surfaces. It can also improve flow and leveling properties, while remaining stable in aqueous formulations having pH 6-8. CoatOSil 1221 surfactant typically causes aqueous solutions to wet most substrates with contact angles near 0/1° and provides spread areas more than 100 times greater than the corresponding volume drop of pure water. CoatOSil 1221 surfactant is 100% active, compatible with a wide variety of waterborne, solvent-borne and radiation-curable resin systems and is not expected to interfere with recoatability.

Potential Applications

CoatOSil 1221 surfactant may be considered for use in a broad range of coating and ink formulations where pH can be controlled between 6 and 8. CoatOSil 1221 surfactant can provide surface tension reduction down to 21 mN/m at use level up to 1% by weight. Typical recommended starting levels are 0.1-0.5%. In testing, CoatOSil 1221 coating additive provided the greatest benefit in waterborne formulations to be applied to hard-to-wet substrate. Possible applications for coatings containing CoatOSil 1221 surfactant include but are not limited to:

- Coatings for plastic films and plastic component
- Wood coating
- Glass coating
- Coatings applied to contaminated (oily) metal surfaces
- Spray or high-speed roll applied coatings

Typical Physical Properties of CoatOSil 1221 Surfactant

	Unit	Typical Property
Appearance		Straw-colored/light yellow liquid
Viscosity @ 25°C	cSt	20
Surface Tension (0.1%)	mN/m	21.7
Pour Point	°C	2
Flash Point, PMCC	°C (°F)	116 (241)
Specific Gravity @ 25°C		1.007
Solubility (5%)		
Water		Dispersible
Methanol		Soluble
Isopropanol		Soluble
Mineral Oil		Dispersible

Patent Status

Technical subject matter in this publication is described and protected by one or more pending US patent applications and foreign counterparts.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.



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