IL SHIM FINE CHEMICALS

CEPTOL FLC 30

SHORT PERFLUORINATED CHAIN FLUOROSURFACTANT

■DESCRIPTION

CEPTOLTM **FLC30** is an anionic fluorinated surfactant that effectively reduces surface tension at very low concentrations for water based systems.

CEPTOLTM **FLC30** is based on short-chain molecule containing 6 fluorinated carbon atoms, that cannot breakdown to PFOA in the environment.

Low addition levels of **CEPTOL**TM **FLC30** provides exceptional wetting, levelling, reduced orange peel effect, making it perfect as additive for floor polish, wax formulation, paint and coating.

■ SPECIAL FEATURES

- _ Specifically for water-based
- _ Good reduction of surface tension at very low concentrations
- _ Excellent levelling
- _ Reduced orange peel effect
- _ Improved wetting of most aqueous based systems
- _ Meets the goals of the voluntary U.S. EPA 2010/2015 PFOA Stewardship Program
- _ Targeted below LOD for PFOA (**PFOA free***)

■SPECIFICATION

Non volatile content: 20~22%

pH: 6 ~ 8

■APPLICATIONS

CEPTOLTM **FLC30** expresses its best properties already at very low concentration $(0.05 \sim 0.4\%)$.

Some examples of application:

- _ Paint and varnish
- _ Inks
- _ Waxes and polishes
- _ Industrial and institutional cleaning
- _ Electronic
- _ Adhesives



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■TECHNICAL INFORMATION

• APPEARANCE: Pale yellow to amber clear liquid

• IONIC NATURE : Anionic

 $\odot pH : 6 - 8$

⊙ DENSITY: 1.00 g/cm³

◆ FLASH POINT : 21° C (70° F)
◆ SOLID CONTENT : 20 - 22 % (wt)

⊙ COMPOSITION: active material 20 - 22 %

Isopropyl alcohol 49 - 51 %

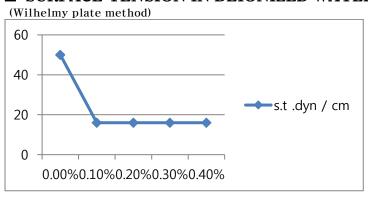
Water 24-26 %

■ SOLUBILITY

- $\geq 2\%$ in water and methyl alcohol
- _ 0.1% in isopropyl alcohol
- _ Insoluble in acetone, ethyl acetate, THF, toluene, heptane and chloroform

TECHNICAL DATA SHEET

■ SURFACE TENSION IN DEIONIZED WATER AT 25° C



- _ 28.6 dyn/cm at 0.01 % (active material)
- _ 17.7 dyn/cm at 0.05 %
- _ 16.8 dyn/cm at 0.1 %

C.M.C: 0.07% in deionized water

■ ROSS-MILES FOAM VOLUME at 40° C (in deionized water) [ml]

	Initial	5 min
0.01% of active material	39	20
0.1% of active material	393	304

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■ SURFACE TENSION IN WATER-BASED RESINS

Resin	Control	CEPTOL [™] FLC30	
		0.1%	0.3%
Acryl emulsion A	39.6	20.7	19.8
Acryl emulsion D	44.6	20.3	19.4

■ STORAGE AND STABILITY

CEPTOLTM **FLC30** is stable for two years if stored in original closed drums at temperatures of $4 \sim 45^{\circ}$ C ($39 \sim 113^{\circ}$ F). Stable to freezing; heating is not recommended (flammable liquid).

■ PERSONAL SAFETY

CEPTOL[™] **FLC30** does not contain toxic substances. Consult the current Material Safety Data Sheet for safety use of the product.

■ PACKAGING

- _ Kg 5 Drum
- $_$ Kg 25 Drum
- _ Kg 100 Drum

^{*} Wherever the term "PFOA Free" is used it means content of PFOA is less than limit of detection (20ppb).