

Super Dynamic Wetting Agent SURFADOL® 610

SURFADOL® 610 is an acetylenic diol based superwetter providing very good static and dynamic surface tension reduction in waterborne coatings and inks.

Composition

100% active liquid
2,5,8,11-Tetramethyldodec-6-yne-5,8-diol ethoxylate
CAS No: 169117-72-0

Typical properties

Chemical family	Ethoxylated Acetylenic diol; Nonionic surfactant
Appearance	Yellow liquid
Equilibrium surface tension (concentration 0.1%, 1b/s)	27.1 dynes/cm
Dynamic surface tension (concentration 0.1%, 6b/s)	28.7 dynes/cm
Density at 25 °C, g/cm ³	0.98
Cloud point (5%), °C	37 (water solution)
Solubility in water	Soluble
Suggested use level	0.1% - 1.0% of total formulation weight

COA specifications

Test Item	Standard
Appearance	Yellow liquid
APHA Color (Pt-Co)	≤350
Density at 25 °C, g/cm ³	0.900-1.000

Special properties

- Specifically for water-based systems
- Reduce dynamic surface tension
- Improve wetting of low-energy and/or contaminated substrates
- Improve flow and leveling
- Silicone-free, APEO free, non-toxic, solvent free

Examples of application

- Water-based printing inks
- Water-based adhesives
- Waterborne industrial coatings
- Fountain solutions
- Metalworking lubricants

Related ethoxylated surfactants

A variety of ethoxylated acetylenic diols can be produced from 2,5,8,11-Tetramethyl-dodec-6-yne-5,8-diol and different amount of ethylene oxide.

SURFADOL® surfactant	Physical form	DST (0.1%, 6b/s)	Solubility in water
SURFADOL® 604	Yellow liquid	29.0 dynes/cm	Slightly soluble
SURFADOL® 607	Yellow liquid	31.4 dynes/cm	Self-dispersing

Processing instructions

- Addition to the coating as supplied or as a predilution is possible.
- Can be introduced in the grind and let-down stage.
- Mix well when use. Added and mixed after other surfactants.
- Pigments, fillers or other solid should be added after SURFADOL® 610 has been evenly mixed.

Package and storage

The standard package for this material is 180kg plastic drums, 4 drums/pallet.
The product is also available in IBCs and 20kg pails.

Keep containers tightly closed in a dry, cool, and well-ventilated place. Product is normally freeze-thaw stable; if it phase separates or freezes at colder temperatures, warm container to 40 °C and mix thoroughly before use.

When stored in an original unopened packaging, the product has a shelf life of 48 months from the date of manufacture.