

TRITON™ X-405 (70%) Surfactant

Product Information

Chemical Description

Name: Octylphenol Ethoxylate

Surfactant Type: Nonionic

R = octyl (C8) x = 35 (avg)

Benefits

- Excellent emulsion stabilizer
- Provides freeze/thaw & ionic stability
- High HLB emulsifier & dispersant
- **Applications**
- Emulsion polymerization
- Paints & coatings
- Floor polish & wax emulsions

- Effective at high temperatures
- Good solubility in the presence of salts or electrolytes & caustic solutions

Typical Physical Properties

Actives, wt%	70
Cloud Point (1)	>100
HLB (2)	17.6
Moles EO	35
Pour Point ⁽³⁾	-6
Appearance ⁽⁴⁾	Pale yellow liquid
pH, 1% in 6H20+10IPA)	7
Viscosity at 25°C (77°F), cP	490
Density at 25°C (77°F), g/mL	1.096
Flash Pt, Closed Cup, ASTM D93	None

 $^{^{(1)}}$ Cloud point: °C, 1 wt% actives aqueous solution

Typical Performance Properties

CMC ⁽⁵⁾	2442
Surface Tension ⁽⁶⁾	52
Foam Height ⁽⁷⁾	93/22

⁽³⁾ Critical Micelle Concentration: ppm at 25°C

Solubility and Compatibility

- Soluble in water
- Miscible in most polar organic solvents
- Insoluble in aliphatic & aromatic hydrocarbons
- Chemically stable in most acidic & alkaline solutions
- Compatible with anionic, cationic and other nonionic surfactants

⁽²⁾ HLB Range: <10 w/o emulsifier, > 10 o/w emulsifier, 10-15 good wetting, 12-15 detergents

⁽³⁾ Pour point: °C

⁽⁴⁾ Appearance at 25°C

⁽⁴⁾ Surface tension: dynes/cm at 1% actives, 25°C

⁽⁵⁾ Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial / 5 minute

Contact information goes here:

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