

TRITON™ X-15

Surfactants

Chemical Description

Name: Octylphenol Ethoxylate

Surfactant Type: Nonionic

$$R = octyl (C8)$$

 $x = 1.5 (avg)$

Benefits

- Oil-soluble emulsifier
- Solubilizer
- Very low HLB
- Excellent compatibility with both polar organic and non-polar solvents

Applications

- Defoamers
- Dye solubilizer
- Chemical intermediate

Typical Physical Properties

Actives, wt%	100
Cloud Point (1)	Insoluble
HLB ⁽²⁾	4.9
Moles EO	1.5
pH, 5% aq solution	7.1
Pour Point ⁽³⁾	3
Appearance ⁽⁴⁾	Yellow liquid
Viscosity at 25°C (77°F), cP	790
Density at 25°C (77°F), g/mL	0.989
Flash Pt, Closed Cup, ASTM D93	171°C 340°F

⁽¹⁾ Cloud point: °C, 1 wt% actives aqueous solution

Typical Performance Properties

CMC ⁽⁵⁾	Insoluble
Surface Tension ⁽⁶⁾	Insoluble
Foam Height ⁽⁷⁾	Insoluble
Draves 25 sec wetting conc, wt%	Insoluble

⁽⁵⁾ Critical micelle concentration: ppm at 25°C

⁽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

⁽⁶⁾ Surface tension: dynes/cm at 1% actives, 25°C

⁽⁷⁾ Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial/5 minute

Solubility and Compatibility

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

Contact information goes here: North America: 1-800-447-4369 Europe: (+32) 3-450-2240 Asia/Pacific: (+852) 2879 7339 Other areas: 1-989-832-1556 http://www.dow.com/surfactants NOTICE: No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

