

## TRITON™ X-102 Surfactant

**Product Information** 

Chemical Description

Name: Octylphenol Ethoxylate

Surfactant Type: Nonionic

$$\mathbb{R} = \left( \begin{array}{c} \\ \\ \end{array} \right)^{O} \left( \begin{array}{c} \\ \\ \end{array} \right)^{O}$$

$$R = octyl (C8)$$
  
  $x = 12 (avg)$ 

Benefits

- Excellent detergent & dispersant
- Good wetting agent
- Effective at high temperatures
- Good solubilizer for less soluble nonionic & anionic surfactants

## **Applications**

- Dispersant for agrochemicals and oilfield applications
- High temperature systems
- Detergent and wetting agent for hard surface cleaners, metal cleaners, paper production, textile processing, paints and coatings

Typical Physical Properties

Actives, wt%	100
Cloud Point (1)	88
HLB (2)	14.4
Moles EO	12
pH, 5% aq solution	8.8
Pour Point <sup>(3)</sup>	13
Appearance <sup>(4)</sup>	Pale yellow liquid
Viscosity at 25°C (77°F), cP	330
Density at 25°C (77°F), g/mL	1.070
Flash Pt, Closed Cup, ASTM D93	254°C 490°F

<sup>(1)</sup> Cloud point: °C, 1 wt% actives aqueous solution

Typical Performance Properties

0 1 1 0 p 0 1 11 0 0	
CMC <sup>(5)</sup>	267
Surface Tension <sup>(6)</sup>	36
Foam Height <sup>(7)</sup>	124/75
Draves 25 sec wetting conc, wt% at 25°C (77°F)	0.06

<sup>(5)</sup> Critical Micelle Concentration: ppm at 25°C

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

<sup>(3)</sup> Pour point: °C

<sup>(4)</sup> Appearance at 25°C

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

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

## Solubility and Compatibility

- Soluble in water
- Miscible in most polar organic solvents & aromatic hydrocarbons
- Insoluble in aliphatic hydrocarbons
- Chemically stable in most 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.



Form No. 119-01883-1107