

### **TERGITOL™ NP-9 Surfactant**

Product Information

Chemical Description

Name: Nonylphenol Ethoxylate

Surfactant Type: Nonionic

**Benefits** 

- Excellent detergency
- Outstanding wetting
- Versatile solubility characteristics
- Exceptional handling properties
- Low odor
- Good rinseability

## **Applications**

- Cleaners & detergents
- Paper & textile processing
- Laundry
- Paints & coatings

- Dust control
- Agrochemicals
- Metalworking fluids

## **Typical Physical Properties**

Actives, wt%	100
Cloud Point (1)	54
HLB (2)	12.9
Moles EO	9
Pour Point <sup>(3)</sup>	-1
Appearance	Pale yellow liquid
pH, 1% aq solution	6
Viscosity at 25°C (77°F), cP	243
Density at 20°C (68°F), g/mL	1.055
Flash Pt, Closed Cup, ASTM D93	247°C 477°F

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

### **Typical Performance Properties**

CMC <sup>(4)</sup>	60
Surface Tension <sup>(5)</sup>	32
Foam Height <sup>(6)</sup>	105/90
Draves 20 sec wetting conc, wt% at 25°C (77°F)	0.06
at 50°C (122°F)	0.04

 $<sup>\</sup>ensuremath{^{\text{(4)}}}$  Critical Micelle Concentration: ppm at 25°C

# Solubility and Compatibility

- Soluble in water
- Soluble in chlorinated solvents and most polar solvents
- Chemically stable in the presence of dilute acids, bases and salts
- Compatible with soaps, anionic and other nonionic surfactants, and many organic solvents

<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>(5)</sup> Surface tension: dynes/cm at 1% actives, 25°C

<sup>(6)</sup> Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial / 5 mintue