



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

This product is suitable for use in applications such as:

- Cleaners & detergents
- Paper & textile processing
- Laundry
- Paints & coatings
- Dust control
- Agrochemicals
- Metalworking fluids

Typical Physical Properties

These properties are typical but do not constitute specifications.

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

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

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

³ Pour point: °C

Typical Performance Properties

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

⁴ Critical Micelle Concentration: ppm at 25°C

⁵ Surface tension: dynes/cm at 1% actives, 25°C

⁶ Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial/5 minute

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

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