

# Berol 611

## Ethoxylated fatty acid alcohol

Low foaming NPEO-free surfactant with excellent wetting and dissolving properties at room temperature. Suitable as replacers for NP 9 / NP 10 surfactants.

### Specifications

Appearance	Clear liquid at 25°C
Cloud point	(1% in water) 52 - 58 °C
Color	≤ 50 Hazen
pH	(1% in water) 5 - 8
Active content	89 - 91 %
Water content	9 - 11% %

### Characteristics

Clear point	14 °C
CMC	18 mg/L
Density	0.97 - 1.01 g/cm <sup>3</sup>
Flash point	≥ 100°C
Foam Height according to Ross-Miles, 50°C, 0.05%	Immediately: 118 mm   After 5 min: 15 mm
HLB	12,9
Pour point	-2 °C
Surface Tension according to Du Noüy, 25°C, 0.1% DIN 53914	28,1 mN/m
Viscosity	106 mPa.s at 20°C
Wetting power according to Draves, 25°C, 0.1%	9 sec
Solubility: 2-propanol	Soluble
Solubility: Ethanol	Soluble
Solubility: Propylene glycol	Soluble
Solubility: Water	Soluble
Solubility: Xylene	Dispersible

#### Notes:

Typical Data are based on our own measurements or derived from the literature. They do not constitute part of the delivery specification.

### Applications

Berol® 611 demonstrates outstanding detergency and solubility properties when formulated into multi-purpose hard surface cleaners, heavy duty degreasers, textile treatment cleaning. The versatility of its application extends to all other cleaning applications that require alternatives to replace NP9.

## Storage

To maintain color, the product should be stored below, or, in the case of bulk storage, only slightly above the melting point/cloud point. Higher temperatures can be tolerated where color maintenance is not of concern. However, the maximum recommended heating coil surface temperature is 100°C. Prolonged heated storage in air can cause discoloration and degradation. Heated storage vessels should be sealed (with a vent pipe) and preferably be nitrogen blanketed. If the product is handled and stored at temperatures near or below its melting point/cloud point there is a risk of separation. In such cases the entire amount should be heated until it melts and homogenizes. In applications involving heat, the temperature and time of exposure should be kept at a minimum.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

Berol® is a registered trademark in many countries. For more information, please visit our website at [www.nouryon.com](http://www.nouryon.com).

The logo for Nouryon, featuring a stylized blue 'N' followed by the word 'ouryon' in a blue sans-serif font.