

BASF Surfactants for APEO Replacement

Performance Chemicals
for detergents
and formulators

BASF
The Chemical Company

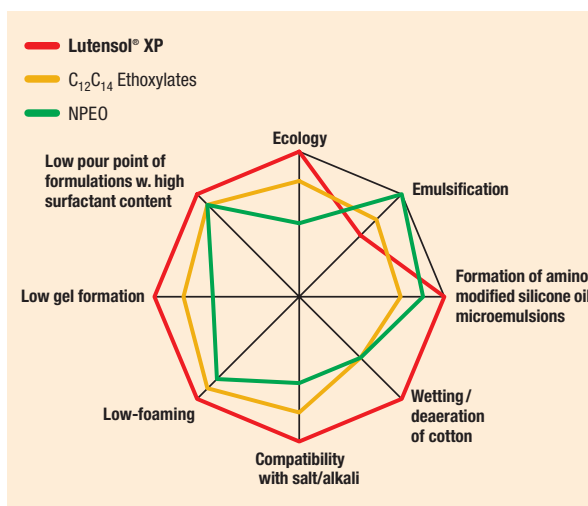
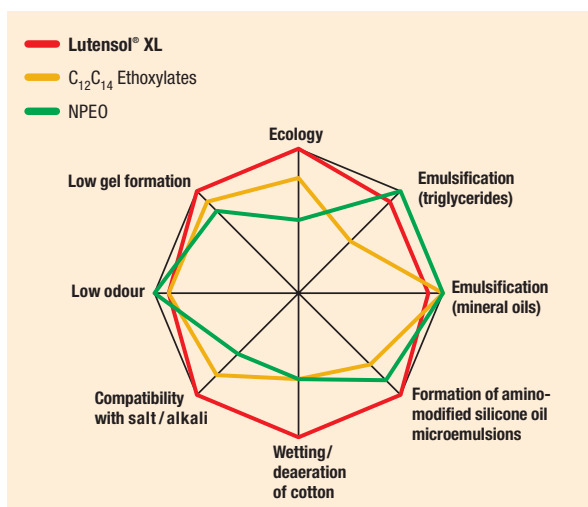
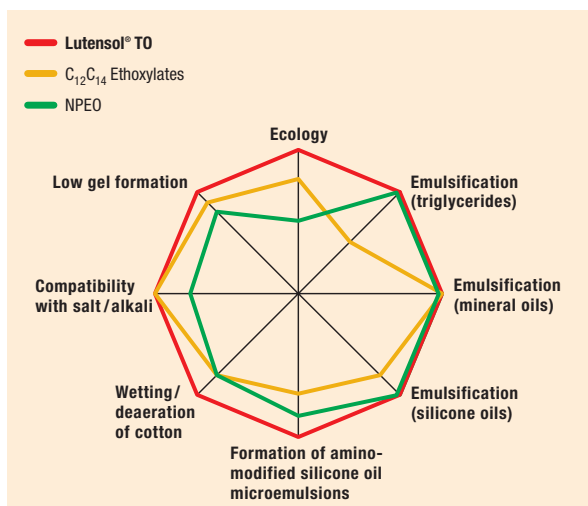
Substitution of alkylphenol ethoxylates (APEOs)

There is a strong trend towards replacing alkylphenol ethoxylates (APEOs) with alternatives, as they are not environmentally friendly. Additionally, the use of APEOs in textile processing has been banned in the European textile industry.

Lutensol® TO, Lutensol® XL, Lutensol® XP and Lutensol® ON types are all excellent alternatives.

- **Lutensol® TO types** are recommended as alternative detergents and emulsifiers
- **Lutensol® XL types** are recommended as alternative wetters and emulsifiers
- **Lutensol® XP types** are recommended as alternative wetters and microemulsion surfactants

The main substitution criteria are a similar HLB value and/or similar cloud point. To achieve optimum performance, it may be necessary to formulate different Lutensol® types with different EO content.



Raw Materials for Textile Chemicals