



Household, Industrial & Institutional

QUESTION(S)

1. Is there an alternative to NEODOL¹ surfactants (ethoxylated alcohols) available from Ashland Distribution? I need a second source.

Answer:

Yes. For many cleaning and other uses, we offer the GENAPOL² series of ethoxylated alcohols. They utilize different alcohols than those found in NEODOL surfactants, so there can be performance and physical property variations. Because of the differences, the appropriate GENAPOL surfactant should be sampled and evaluated to determine if performance is acceptable. GENAPOL surfactants are readily biodegradable, and the 26-L series is based on natural feedstocks.

¹ Registered trademark of Shell Oil Company

² Registered trademark of Hoechst AG

2. How can you avoid the gel formation seen when nonionic surfactants such as NP-9 are added to aqueous solutions?

Answer:

Most nonionic surfactants will form a gel when added to a cool or cold aqueous solution. The resulting gel will take a long mixing time to fully dissolve. This can be avoided by first warming the solution to about 120°F., adding the surfactant and using continuous agitation.

3. How can I include Hydrogen Peroxide in a granular cleaning compound for stain removal such as a deck cleaner?

Answer:

Try Sodium Percarbonate, a dry, free-flowing chemical which is made by combining Hydrogen Peroxide and Soda Ash. It is relatively easy to store, handle and use. Equivalent Hydrogen Peroxide content is more than 27 percent by weight.

4. How much alkali is needed to neutralize DDBSA (Dodecylbenzene Sulfonic Acid) in cleaning formulations?

Answer:

See the table below

Alkaline Product	Pounds/100 pounds DDBSA
Caustic Soda 50% Solution	26.6
Caustic Soda Anhydrous(dry)	13.3
Caustic Potash 45% Solution	41.3
Caustic Potash Flake(dry)	20.6

5. What does the term cloud point mean when referring to nonionic surfactants?**Answer:**

The temperature above which the surfactant becomes insoluble in water. This is the opposite of most compounds, which are more soluble as the temperature is increased. Cleaning power tends to be better near the cloud point temperature. Foaming is greatly reduced above the cloud point. Low-foaming surfactants are often selected based on their cloud point.

6. Is there a low toxicity nonionic surfactant available from Ashland for high pressure spray metal cleaning?**Answer:**

Yes. RHODACLEAN¹ ASP is a new surfactant from Europe which combines exceptional cleaning power and low-foaming characteristics with an outstanding ecotoxic profile. This new product is based on a natural raw material.

¹ Trademark of Chimie, Rhodia

7. Hydrotropes are used in many hard surface cleaners. What are they?**Answer:**

Hydrotropes have the ability to greatly increase the solubility of ("couple") other organic ingredients, such as nonionic surfactants or solvents, in aqueous cleaners. SXS (Sodium Xylene Sulfonate) is commonly used as a hydrotrope. Since SXS has no detergency, Amphoteric or Phosphate Ester surfactants which contribute both detergency and hydrotroping power to the cleaner are used in high performance formulations.

8. What is meant by the "Moles of EO" when talking about surfactants?**Answer:**

EO stands for Ethylene Oxide, a colorless, water-soluble gas used to produce many surfactants and other chemicals. When EO is combined with oil-soluble raw materials like fatty alcohols or nonylphenol, surfactants are produced having varying degrees of water and oil solubility. A mole is a specified weight of a particular chemical, in this case EO. The more EO present in a surfactant, the more water-soluble that surfactant will be. NP 9 designates a nonylphenol surfactant with 9 moles of EO.

9. Is there a more consistent grade of Petroleum Sulfonate than the Natural Petroleum Sulfonates?**Answer:**

Ashland distributes Aristonates from Pilot Chemical which are specifically produced from a consistent feed stock which reduces the need for the user to modify a metalworking formulation to correct for quality variations in the emulsifier package.