

Flexisurf™ EHDP

Sodium Octyliminodipropionate

Overview

- 50% active Sodium
 Octyliminodipropionate in water
- Salt-free, Multi-functional amphoteric surfactant
- Compatible with nonionic, anionic and cationic surfactants
- Provides low foaming detergency in hard or soft water
- Versatile surfactant for wetting, emulsification, solubilizing and emulsification in acid, neutral and alkaline formulations
- Efficient hydrotrope for coupling nonionic surfactants into strong electrolyte and high alkaline systems
- This product has been used in at least one formulation that has received Safer Choice approval
- CAS#94441-92-6/EINECS#305-318-6

Applications

- · Hard surface cleaners
- Concentrated Liquid, low foaming detergents (acid or alkaline)
- · Textile scours and finishing
- · Industrial cleaners
- · Clean-In-Place detergent
- · Paints and coatings
- · Oil Field
- Car Wash

Technical Information

Flexisurf EHDP is a versatile amphoteric surfactant that contributes low foam, cleansing and solubilizing properties to formulations ranging from industrial degreasers to vehicle wash. Effective in acidic, neutral and alkaline solutions, multi-functional EHDP compatibilizes nonionic surfactants in high electrolyte formulations while contributing detergency with controlled foam, unlike simple hydrotropes.

Flexisurf EHDP functions as a foam stabilizer in concentrated brine solutions, and as an effective low-foam hydrotrope in alkaline cleaning formulations. The exceptional quality of EHDP allows for use in a wide range of markets and applications. HI&I Cleaners formulations can benefit from the superior wetting performance, caustic solubility and coupling performance for improved detergency, foam stabilizing and ingredient compatibility.

Formulary

Flexisurf EHDP is a low foamer that provides good detergency in systems that require high cloud points. EHDP is readily biodegradable and is globally accepted.

Recommended usage: Hard Surface Cleaners 1% - 2% Spray Cleaners 1% - 2% Wax Stripper 3% - 5% All Purpose Cleaners 5% -10%

Typical Properties

| PROPERTY | VALUE |
|----------------------|-------------------------------------|
| Appearance | Clear, light yellow to amber liquid |
| Odor | Mild |
| Ionic character | Amphoteric |
| Water solubility | Soluble |
| Active content, % | 50.0±1.0 |
| pH (10% aq.) | 8.5±1.0 |
| Density@25°C | 1.05±0.04 |
| Boiling Point | 100°C |
| Flash point | Does not ignite below 100°C |
| Storage | Stable to freezing |
| Shelf life | 12 months |

Packaging and Handling

Flexisurf EHDP is available in: 275 gallon totes (Net Wt. 2250 lbs) 55 gallon plastic drums (Net Wt. 450 lbs) 5 gallon pails (Net Wt. 40 lbs).

Refer to the Safety Data Sheet (SDS) for information on the safe use, handling, and disposal of this product.

DOT Classification: Non-Regulated

Whether you're looking for a replacement product or an ingredient for a specific attribute, give us a call. We can provide assistance based upon your particular formulation requirements and composition; please feel free to contact us.

Please refer to back page for important information

Flexisurf EHDP

Versatile solubilizing amphoteric surfactant

Amphoteric surfactants are broadly defined as heteropolar organic compounds having 2 functional (ionic) oppositely charged groups per molecule. In acid solutions, the surfactant functions as a cationic amine salt, where in alkaline solutions it functions as an anionic carboxylate salt. The cationic and anionic properties are balanced, in what's described as the isoelectric pH range, where an ion is formed that is simultaneously anionic and cationic.

The amphoteric nature of Flexisurf EHDP allows its use in both anionic and cationic surfactant based products, for example two-step CIP systems utilizing an anionic-component and a cationic-component. The amphoteric nature and the unique specific structure of Flexisurf EHDP suggests differentiating use in applications such as mining and oil field, where properties such as flotation correlate with an interaction of ionized properties of the surfactant with oppositely charged sites on the minerals partitioned through an association with the non-polar alkyl component properties.

A characteristic of Flexisurf EHDP is in its ability to foam in concentrated brine solutions...just the opposite of its low foam characteristic in fresh water. In Oil Field applications, when a wellbore is filled with high-density concentrated brine solutions, the hydrostatic pressure is balanced by the formation pressure. Once the work is completed, it is necessary for the fluid to return to the surface of the well. A common well dewatering method consists of the addition of a foaming agent to the fluid inside the well. Gas is then used to convert the liquid into low-density foam. The foam, which produces only a fraction of the hydrostatic pressure of the liquid, flows out of the well with less pressure required than that for the non-foamed brine. In a similar fashion, if a well is producing brine, it can be removed from the well with foaming agent assistance, thereby preventing the phenomena of "drowning" the well.

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