DeTERIC ODP-LF

DeTERIC ODP-LF, sodium octyliminodipropionate, CAS# 94441-92-6, is an excellent, low foam hydrotrope recommended for use in alkaline and acid systems. This amphoteric has an isoelectric point at pH ~7.0. It is readily biodegradable and suitable for use in environmentally safer formulations.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance @ 25°C</td>
<td>Yellow liquid</td>
</tr>
<tr>
<td>% Solids</td>
<td>50 +/- 1%</td>
</tr>
<tr>
<td>pH (as-as)</td>
<td>7.5 – 9.5</td>
</tr>
<tr>
<td>Color* (Gardner)</td>
<td>8 max.</td>
</tr>
</tbody>
</table>

* darkens on aging

SOLUBILITY  DeTERIC ODP-LF is soluble in water, alcohols, and glycols. It is insoluble in oils and most solvents.

TYPICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density @ 25°C</td>
<td>~1.11 g/ml</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0 grams/liter</td>
</tr>
</tbody>
</table>

- Practically non-foaming
- Excellent stability in strong alkali, acid, & moderate concentrations of electrolytes
- Compatible with all surfactant types
- Approved for use as inert in non-food pesticide formulations
- Readily biodegradable
- Brine stability
- Stabilizes foam in brine solutions
- Excellent hydrotrope & solubilizer
- Exhibits corrosion inhibitor properties

APPLICATIONS

- Low foam, highly alkaline or acid cleaners
- Mechanical dishwashing detergents
- Steam cleaners
- Laundry detergents
- Dairy cleaners
- Alkaline cleaners
- Concrete cleaners
- Demulsifier for oils and grease in wastewater streams
- Acid bowl cleaners
- Acid tile cleaners
- Demulsifier for tramp oils in synthetic cutting fluids

Continued
Cloud Point Data

DeTERIC ODP-LF was tested for its ability to hydrotrope NPE-9 into a variety of alkaline electrolytes. The test consisted of adding 1.5% by weight of a hydrotrope to the electrolyte, followed by 1.0% by weight NPE-9. The solution was then heated until reaching the cloud point, the temperature at which the NPE-9 clouds out of solution.

Hydrotrope Cloud Points
1% NPE-9 + 1.5% Hydrotrope (as-is)

Hydrotropes compared:

DeTERIC ODP-LF: sodium octyliminodipropionate
DeTROPE SA-45: sodium alkanoate
DeTROPE CA-100: mixed amine carboxylate
DePHOS H66-872: phosphate ester
DePHOS P-6LF-AS: phosphate ester
SXS: sodium xylene sulfonate