Performance Chemicals
SAPEG 300
Polyethylene Glycol

CHEMICAL DESCRIPTION

SAPEG 300 consists of a distribution of polymers of varying molecular weights with an average molecular weight of 300. It is a colorless and odorless liquid, completely miscible in water and many organic solvents. SAPEG 300 is non-toxic, non-irritant and is used as humectant, lubricant, solvent and viscosity modifier in many applications.

APPLICATIONS

- **Chemicals**
  SAPEG 300 is used as intermediate for PEG esters, used as softeners and dispersing agents in Textile and leather industries, in methacrylate resin manufacturing and as polyurethane foams release agents.

- **Textile**
  SAPEG 300 is used as a modifier in the production of high strength regenerated cellulose fibers.
  SAPEG 300 is used in the formulation of spin finish to slow the acidification of the viscose resulting in higher wet and drying strengths as well as reduced swelling capacities in staple fibers, in cord / textile rayon.

- **Paints & Resins**
  SAPEG 300 can be used as an intermediate in the manufacture of resins such as alkyd resins, methacrylate resin.

- **Printing and Inks**
  SAPEG 300 finds usage as a binder and humectants in stamp pad inks and steam set inks.

- **Paper**
  SAPEG 300 is used as a lubricant in paper coating formulations, also as anti-sticking agents and oil resistors.

- **Cellulose**
  SAPEG 300 is used as humectants in cellulosic films.

- **Metal working**
  SAPEG 300 can be used as a lubricant in formulations for stamping and rolling, in fluids for cutting and grinding and as components in buffering and polishing compounds.
SAPEG 300 can be used as an additive in abrasives for electro plating and electro polishing process and in drawing and extrusion compounds.

- **Ceramic and Glass**
  SAPEG 300 is used as binder for glazing in the ceramic industry.

- **Adhesives**
  SAPEG 300 is used as a plasticizer to increase the lubricity and humectants in adhesives. SAPEG 300 is also used in aqueous emulsions of polyvinyl acetates to produce water resistant adhesives.

- **Rubber**
  SAPEG 300 is used as lubricant for Air bags and bladders and as heat transfer media.
SPECIFICATIONS

<table>
<thead>
<tr>
<th>Properties</th>
<th>Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance @ 25°C</td>
<td>SKIMS/QAD-SOP-168</td>
<td>Clear Viscous Liquid</td>
</tr>
<tr>
<td>Hydroxyl No. (mg KOH/g)</td>
<td>SKIMS/QAD-SOP-209</td>
<td>356.0 - 394.0</td>
</tr>
<tr>
<td>Acid No. (mg KOH/g), Max.</td>
<td>ASTM D 4252</td>
<td>0.5</td>
</tr>
<tr>
<td>Water (%), Max.</td>
<td>ASTM E 203</td>
<td>0.5</td>
</tr>
<tr>
<td>Color (APHA), @25°C, Max.</td>
<td>ASTM D 1209</td>
<td>40</td>
</tr>
<tr>
<td>pH @ 25°C 5wt% in Aq. Soln.</td>
<td>ASTM D 4252</td>
<td>4.5 - 7.5</td>
</tr>
</tbody>
</table>

On request SAPEG 300 can also be supplied in pharmaceutical grades.

TYPICAL PHYSICAL PROPERTIES

Density @ 25°C, g/ml 1.12-1.13
Freezing Range (°C) 5-9
Flash Point (°C), DIN 51758 >150
Ash Content %, Max. 0.1

SOLUBILITY AND COMPATIBILITY

- Soluble in water, acetone, alcohol and glycol ethers.
- Miscible with monomeric and polymeric substances of largely hydrophilic nature-such as dyes and pigments and animal, vegetable and synthetic glues and binders
- Insoluble in Hydrocarbons
- Compatible with Nonionic, Anionic, Cationic Surfactants.
STORAGE AND HANDLING

For information on storage and handling please, refer to the Material Safety Data Sheet (MSDS) about this product.

TOXICITY AND SAFETY

For information on toxicity, safety and safe disposal please refer to the Material Safety Data Sheet (MSDS) about this product.

SHIPPING DATA

The product is available in Bulk, ISO Tanks, Truck Tankers and Drums. Small samples are available by contacting concerned Regional Offices or our Head Quarter at Riyadh (Saudi Arabia).