



# Specifications

|                    |   |
|--------------------|---|
| Product Name       | <b>Sodium AOS-40 C14-16 Liquid Surfactant</b>   |
| Synonyms           | AOS 40<br>Alpha Olefin Sulfonate<br>Sodium C 14 - 16 Olefin Sulfonate<br>AOS<br>BIOTERGE AS 40 K<br>Sodium Alpha Olefin Sulfonate   |
| CAS Number         | 68439-57-6  |
| INCI Name          | Sodium C14-16 Olefin Sulfonate  |
| Applications       | Sodium AOS-40 C14-16 is an aqueous solution of sodium olefin sulfonate which is produced by the continuous sulfonation of alpha olefins via the falling film process. This process minimizes the formation of disulfonates thereby offering a consistent high quality product. Sodium AOS-40 C14-16 is an ideal surfactant for a variety of detergent and personal care applications including hand soaps, shampoos, and bath products. It offers the formulator excellent viscosity and foam characteristics, as well as improved mildness over lauryl sulfates. It is more stable than alcohol sulfates over a broad pH range.  |
| Typical Properties | Appearance at 25 °C ..... Clear liquid<br>Actives (MW 315), % ..... 39.2<br>Unulfated Matter, % ..... 0.68<br>Sodium Chloride, % ..... 0.27<br>Sodium Sulfate, % ..... 0.77<br>pH, 10% aqueous ..... 5.8<br>Color (Klett, 5% active) ..... 40<br>Viscosity at 25 °C, cps ..... 151<br>Cloud Point (as is), °C (°F)..... 7 (45)<br>Pour Point, °C (°F) ..... -4 (25)<br>Freeze Point, °C (°F)..... -7 (19)<br>Flash Point (PMCC), °C (°F) ..... >94 (>201)<br>Boiling Point, °C (°F) ..... >100 (>212)<br>Density, g/ml (lbs/U.S. gal) ..... 1.070 (8.9)<br>Critical Micelle Concentration, mg/L ..... 301<br>RVOC, U.S. EPA, % ..... 0<br>Preservative ..... Methylchlorisothiazolinone/Methylisothiazolinone |
| Biodegradability   | Product is readily biodegradable. A detailed biodegradability statement is available upon request.  |
| Toxicity           | Sodium AOS-40 C14-16 is slightly toxic orally (oral LD <sub>50</sub> = 1.3-2.4 g/kg) and causes moderate skin and eye irritation at 10% active.   |
| Storage & Handling | Normal safety precautions (i.e., the use of gloves and safety goggles) should be employed when handling Sodium AOS-40 C14-16. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material. It is recommended that Sodium AOS-40 C14-16 be stored in sealed containers and kept at temperatures above 50 °F (10 °C). Avoid overheating or freezing. This material can gel and separate if exposed to cooler temperatures. Heat it slowly with mild agitation to insure its homogeneity before use.  |