



## BIO-TERGE<sup>®</sup> AS-90 BEADS

Product Name																											
Chemical Structure	RCH=CHCH <sub>2</sub> --SO <sub>3</sub> Na      R=C <sub>11-13</sub>																										
Chemical Description	Sodium C <sub>14-16</sub> Alpha Olefin Sulfonate																										
INCI Name	Sodium C <sub>14-16</sub> Olefin Sulfonate																										
CAS Registry No.	68439-57-6																										
Applications	BIO-TERGE AS-90 BEADS is an economical and versatile, biodegradable surfactant. It is a high active, spray dried material with excellent wetting, foaming, and deterative properties in alkaline, acid, or neutral media and in the presence of metallic salts commonly found in hard waters. BIO-TERGE AS-90 BEADS is used in a variety of household and industrial applications including shampoos, hand soaps and bath products as well as dust control, carpet frother, concrete foamer and firefighting. BIO-TERGE AS-90 BEADS provides excellent flash foam and is stable over a broad pH range.																										
Typical Properties	<table border="0"> <tr> <td>Appearance at 25 °C.....</td> <td>Off-white to light yellow, free flowing powder/beads</td> </tr> <tr> <td>pH, 5% aqueous.....</td> <td>9.0</td> </tr> <tr> <td>Actives, % (EW 315) .....</td> <td>88</td> </tr> <tr> <td>Moisture, Karl Fisher, % water .....</td> <td>1.8</td> </tr> <tr> <td>Color, Klett, 5% active.....</td> <td>90</td> </tr> <tr> <td>Flash Point (SETA), °C (°F) .....</td> <td>&gt;94 (&gt;201)</td> </tr> <tr> <td>Density, untamped, g/ml (lbs/U.S. gal).....</td> <td>0.3 (2.496)</td> </tr> <tr> <td>RVOC, U.S. EPA, % .....</td> <td>0</td> </tr> <tr> <td>Preservative .....</td> <td>None Required</td> </tr> <tr> <td>Draves Wetting, 0.20% aqueous, sec at 25 °C .....</td> <td>11</td> </tr> <tr> <td>Surface Tension, 0.10% aqueous, dynes/cm at 25 °C .....</td> <td>46.2</td> </tr> <tr> <td>Foam Height, Ross-Miles, 0.20% aqueous, cm, initial .....</td> <td>18</td> </tr> <tr> <td>Foam Height, Ross-Miles, 0.20% aqueous, cm, 5 min.....</td> <td>16</td> </tr> </table>	Appearance at 25 °C.....	Off-white to light yellow, free flowing powder/beads	pH, 5% aqueous.....	9.0	Actives, % (EW 315) .....	88	Moisture, Karl Fisher, % water .....	1.8	Color, Klett, 5% active.....	90	Flash Point (SETA), °C (°F) .....	>94 (>201)	Density, untamped, g/ml (lbs/U.S. gal).....	0.3 (2.496)	RVOC, U.S. EPA, % .....	0	Preservative .....	None Required	Draves Wetting, 0.20% aqueous, sec at 25 °C .....	11	Surface Tension, 0.10% aqueous, dynes/cm at 25 °C .....	46.2	Foam Height, Ross-Miles, 0.20% aqueous, cm, initial .....	18	Foam Height, Ross-Miles, 0.20% aqueous, cm, 5 min.....	16
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Biodegradability	Product is biodegradable. Additional information is available upon request.																										
Toxicity	BIO-TERGE AS-90 BEADS has not been tested; however, a great deal of information regarding the toxicity of sodium alpha olefin sulfonates is available. Sodium alpha olefin sulfonate is slightly toxic orally in rats (LD <sub>50</sub> >4000 mg/kg at 25% active) and causes slight skin and minimal eye irritation at 1% concentration.																										
Storage & Handling	<p>Normal safety precautions (i.e., gloves, respirator and safety goggles) should be employed when handling BIO-TERGE AS-90 BEADS. Contact with the eyes and prolonged contact with the skin should be avoided. Avoid breathing the dust from the product. Wash thoroughly after handling material.</p> <p>It is recommended that BIO-TERGE AS-90 BEADS be stored in sealed containers and kept in a cool, dry place to insure against agglomeration and any deterioration in color. Partly used drums should be promptly resealed with drum cover and accessory clamp after twisting and tying off the poly-bag liner.</p> <p>Stepan's recommended re-test for this product is 12 months (1 year) from the date of manufacture. After 12 months, we recommend the customer re-analyze to assure product is within specification.</p> <p><u>Standard Packaging:</u> BIO-TERGE AS-90 BEADS is available in open top fiber drums (net weight 200 lb, 91 kg).</p>																										



Clearances

All components of BIO-TERGE AS-90 BEADS are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: Europe (EINECS 270-407-8), Japan (ENCS 2-2038 or 2-2807), Canada (DSL 68439-57-6), Australia (AICS 68439-57-6), Korea (ECL Serial No. KE-32477) and Philippines (PICCS 68439-57-6). Taiwan (68439-57-6), China (IECSC 68439-57-6), New Zealand (ZNIoC 68439-57-6), United States (TSCA 68439-57-6).

BIO-TERGE AS-90 BEADS is USDA authorized.

BIO-TERGE AS-90 BEADS is available as Kosher Certified.

**It is the responsibility of the formulator to review the chemical control regulations for each country where the end product is intended to be sold or used.**

Product Stewardship

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

Additional Safety Information

A Safety Data Sheet is available upon request.



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