

## Product Bulletin

Product Name	<b>BIO-SOFT® E-678</b>
Chemical Description	Fatty Alcohol Ethoxylate
CAS Number	68131-39-5
Applications	<b>BIO-SOFT E-678</b> is a nonionic surfactant prepared by ethoxylating fatty alcohol. It provides moderate, stable foam and high detergency in such uses as detergents, dishwash and hand soaps. It is water soluble and highly effective at low concentrations, working well in warm and hot water applications. It can also be used as a dyeing assistant, emulsifier and wetting agent.
Typical Properties	Hydrophobe ..... Neodol 25 Average No. moles E.O. .... 9 HLB ..... 13.3 Pour Point, °C ..... 11 Appearance at 25°C ..... clear liquid Colour, APHA ..... 50 max. Activity, % ..... 84 - 86 pH (1% aq.) ..... 6.5 - 8.5
Biodegradability	<b>BIO-SOFT E-678</b> is readily biodegradable
Toxicity	<b>BIO-SOFT E-678</b> is low to moderately toxic orally. (LD <sub>50</sub> is 4.15 g/kg.) Undiluted <b>BIO-SOFT E-678</b> is a moderate to severe skin and eye irritant while a 10% dilution is a generally mild to moderate skin irritant.
Storage & Handling	<p>Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling <b>BIO-SOFT E-678</b>. Contact with eyes and skin should be avoided.</p> <p>It is recommended that <b>BIO-SOFT E-678</b> be stored in sealed containers and kept in a cool, dry place. If material is frozen it should be heated gently and stirred to ensure it is homogeneous before use.</p> <p>Bulk Storage Information: <b>BIO-SOFT E-678</b> can be stored in vessels of 316 stainless steel, but carbon steel is adequate. Material should be stored between 37-44°C. An internal hairpin coil of carbon steel with low pressure steam (under 50 psig) should be used if heating is required. Mild agitation is required if tank is heated. 316 stainless steel is preferred for pumps, pipes and transfer lines, however carbon steel is adequate.</p> <p>Standard Packaging: <b>BIO-SOFT E-678</b> is available in bulk and 215 kilogram drums.</p>
Clearances	<b>BIO-SOFT E-678</b> is listed on the Canadian Domestic Substances List.



Additional  
Safety  
Information

A Material Safety Data Sheet is available upon request.

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