

Technical Bulletin:






























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PRODUCT % RENEWABLE CARBON AND BIODEGRADABILITY

Many of Pilot Chemical's products are produced utilizing renewable natural resources and are readily biodegradable. The table below details the percentage of renewable carbon for Pilot Chemical's products along with their biodegradability status with the European Parliament Regulation (EC) No. 648/2004. Regulation No. 648/2004 states a surfactant is readily biodegradable if the level of biodegradability in one of several OECD screening tests is 60% or more within 28 days. Environmental scientists' support this level of biodegradability ensures that a product will degrade readily and completely.

Product	INCI/Chemical Name	Physical Foam/Activity	% Renewable Carbon*	Readily Biodegradable
Calamide® C	Cocamide DEA	Liquid / 100%	76.5	☑
Calamide® CW-100	Cocamide DEA	Liquid / 100%	58.1	☑
Calamide® CWT	Modified Cocamide DEA	Liquid / 100%	70.5	☑
Calamide® F	Modified Oleamide DEA	Liquid / 100%	81.8	☑
Calamide® MC	Cocamide MEA	Flake / 100%	86.7	☑
Calamide® O	Cocamide DEA and Oleamide DEA	Liquid / 100%	77.3	☑
CalBlend® BSC	Sodium Laureth Sulfate (and) Cocamidopropyl Betaine (and) PEG-80 Sorbitan Laurate (and) PEG-150 Disterate	Liquid / 42%	52.6	☑
CalBlend® CLEAR	Sodium Laureth Sulfate (and) Cocamidopropyl Betaine (and) Cocamide DEA	Liquid / 35%	50.3	☑
CalBlend® ECO-1	Sodium Laureth Sulfate (and) Sodium Lauryl Sulfate (and) Cocamidopropyl Betaine (and) Cocamide MEA	Liquid / 35%	70.8	☑
CalBlend® ECO-40D	Sodium Lauryl Sulfate (and) Cocamidopropyl Betaine (and) Cocamide DEA	Liquid / 40%	77.8	☑
CalBlend® PEARL	Sodium Laureth Sulfate (and) Cocamidopropyl Betaine (and) Cocamide DEA (and) EGMS	Liquid / 36%	52.5	☑
CalBlend® PS-2	Cocamide DEA (and) Sodium Lauryl Sulfate (and) Sodium Laureth Sulfate (and) Cocamidopropyl Betaine	Liquid / 46%	72.6	☑
Calfoam® ALS-30	Ammonium Lauryl Sulfate	Liquid / 30%	100.0	☑
Calfoam® ALS-70	Ammonium Lauryl Sulfate	Liquid / 70%	100.0	☑
Calfoam® EA-303	Ammonium Laureth Sulfate (3 Mole EO)	Liquid / 27%	68.4	☑
Calfoam® EA-603	Ammonium Lauryl Ether Sulfate (3 Mole EO)	Liquid / 60%	68.4	☑
Calfoam® EA-682	Ammonium Decyl Ether Sulfate (2.2 Mole EO)	Liquid / 60%	69.2	☑
Calfoam® EA-703	Ammonium Laureth Sulfate (3 Mole EO)	Liquid / 70%	68.4	☑
Calfoam® ES-301	Sodium Laureth Sulfate (1 Mole EO)	Liquid / 26%	86.7	☑
Calfoam® ES-302	Sodium Laureth Sulfate (2 Mole EO)	Liquid / 27%	76.5	☑
Calfoam® ES-302HS	Sodium Laureth Sulfate (2 Mole EO)	Liquid / 27%	76.5	☑
Calfoam® ES-302HV	Sodium Laureth Sulfate (2 Mole EO)	Liquid / 27%	76.5	☑
Calfoam® ES-303	Sodium Laureth Sulfate (3 Mole EO)	Liquid / 28%	68.4	☑
Calfoam® ES-603	Sodium Laureth Sulfate (3 Mole EO)	Liquid / 60%	68.4	☑
Calfoam® ES-702	Sodium Laureth Sulfate (2 Mole EO)	Liquid / 70%	76.5	☑
Calfoam® ES-703	Sodium Laureth Sulfate (3 Mole EO)	Liquid / 70%	68.4	☑
Calfoam® SLS-30	Sodium Lauryl Sulfate	Liquid / 30%	100.0	☑
Calfoam® TLS-40	TEA Lauryl Sulfate	Liquid / 40%	68.4	☑
Calimulse® AOS-40	Sodium C14-16 Alpha Olefin Sulfonate	Liquid / 40%	0.0	☑
Calimulse® EA-303	Ammonium Laureth Sulfate (3 Mole EO)	Liquid / 26%	68.4	☑
Calimulse® L-22	Sodium Linear Alkyl benzene Sulfonate	Liquid / 22%	0.0	☑
Calimulse® L-30	Sodium Linear Alkyl benzene Sulfonate	Liquid / 30%	0.0	☑
Calimulse® L-50	Sodium Linear Alkyl Benzene Sulfonate	Paste / 50%	0.0	☑
Calimulse® PRS	Isopropylamine Linear Alkyl Benzene Sulfonate	Liquid / 93%	0.0	☑

Product	INCI/Chemical Name	Physical Foam/Activity	% Renewable Carbon	Readily Biodegradable
Calimulse® SLS	Sodium Lauryl Sulfate	Liquid / 30%	100.0	
Calinate® LE	Disodium Laureth Sulfosuccinate	Liquid / 40%	56.5	
Caloxamine® CPO	Cocamidopropylamine Oxide	Liquid / 32%	81.2	
Caloxamine® LO	Lauramine Oxide	Liquid / 30%	85.6	
Calsoft® AOS-1245	Sodium C12 Alpha Olefin Sulfonate	Liquid / 45%	0.0	
Calsoft® AOS-40	Sodium C14-16 Alpha Olefin Sulfonate	Liquid / 40%	0.0	
Calsoft® AOS-FS	Sodium C14-16 Olefin Sulfonate	Liquid / 43%	0.0	
Calsoft® F-90	Sodium Linear Alkyl Benzene Sulfonate	Flake / 90%	0.0	
Calsoft® L-40	Sodium Linear Alkyl Benzene Sulfonate	Liquid / 40%	0.0	
Calsoft® L-40 Slurry	Sodium Linear Alkyl Benzene Sulfonate Slurry	Slurry / 40%	0.0	
Calsoft® L-50 Slurry	Sodium Linear Alkyl Benzene Sulfonate Slurry	Slurry / 50%	0.0	
Calsoft® L-60	Sodium Linear Alkyl Benzene Sulfonate	Paste / 60%	0.0	
Calsoft® L-60 Slurry	Sodium Linear Alkyl Benzene Sulfonate Slurry	Slurry / 60%	0.0	
Calsoft® LAS-99	Linear Alkyl Benzene Sulfonic Acid	Liquid / 97%	0.0	
Calsoft® LPS-99	Linear Alkyl Benzene Sulfonic Acid	Liquid / 97%	0.0	
Calsoft® OA-50	Oleic Sulfonic Acid	Liquid / 50%	100.0	
Calsoft® OS-45S	Sodium Oleic Sulfonate	Liquid / 45%	100.0	
Calsoft® P-85	Sodium Linear Alkyl Benzene Sulfonate	Flake / 85%	0.0	
Calsoft® T-60	Triethanolamine Linear Alkyl Benzene Sulfonate	Liquid/60%	0.0	
Calsuds® 81	Proprietary Concentrated Detergent Blend	Liquid / 60%	2.0	
Calsuds® A	Proprietary Concentrated Detergent Blend	Liquid / 50%	2.7	
Calsuds® CD-6	Proprietary Modified Coconut Diethanolamide	Liquid / 100%	37.9	
Calsuds® CWC-2	Proprietary Detergent Blend	Liquid / 43%	19.7	
Caltaine® C-35	Cocamidopropyl Betaine	Liquid / 30%	72.2	
Pilot® D-300	4 Sulfophthalic Acid	Liquid / 50%	0.0	
Pilot® PTSA-65	<i>para</i> -Toluene Sulfonic Acid	Liquid / 65%	0.0	
Pilot® PTSA-99	<i>para</i> -Toluene Sulfonic Acid	Crystals / 99%	0.0	
Pilot® SXS-40	Sodium Xylene Sulfonate	Liquid / 40%	0.0	
Pilot® SXS-96	Sodium Xylene Sulfonate	Powder / 95%	0.0	

*% renewable carbon is based on the percentage of the carbon atoms from renewable sources.

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