



**Biesterfeld**  
*Competence in Solutions*

Cleaning



Surfactant Guide

# Surfactant

Surfactant Type	Trade Name	Chemical Description	CAS-Number
Anionics	<b>ALFANOX® 46 or 46/BA</b>	Sodium C14-16 Olefin Sulfonate	68439-57-6
	<b>EMAL® 10 Range</b>	Sodium Lauryl Sulfate	85586-07-8
	<b>EMAL® 270D</b>	Sodium Laureth Sulfate	68891-38-3
	<b>EMAL® 228 HP or D/JM</b>	Sodium Laureth Sulfate	68891-38-3
	<b>EUCAROL AGE/ET</b>	Sodium Alkylpolyglucose Tartrate	n.n.
	<b>ICTEOL® K-50E</b>	Potassium Oleate	68424-23-7
Anionics/ Non-ionics	<b>Libratex DOS70</b>	70% Sodium Di-Octyl Sulphosuccinate	577-11-7
	<b>AKYPO® LF 1</b>	Capryleth-6 Carboxylic Acid	53563-70-5
	<b>AKYPO® LF 2</b>	Capryleth-9 Carboxylic Acid	53563-70-5
	<b>AKYPO® LF 4</b>	Capryleth-9 Carboxylic Acid/Hexeth-4 Carboxylic Acid	53563-70-5/105391-15-9
	<b>AKYPO® LF 6</b>	Capryleth-9 Carboxylic Acid/Buteth-2 Carboxylic Acid	53563-70-5/107600-34-0
	<b>AKYPO® LM-40</b>	Lauryl/Myristyl Ether Carboxylic Acid	27306-90-7
Non-ionics	<b>AKYPO® RLM 45 CA</b>	Laureth-6 Carboxylic Acid	27306-90-7
	<b>AMIDET® B-112</b>	Cocamide DEA	68603-42-9
	<b>AMIDET® N</b>	PEG-4 Rapeseedamide	85536-23-8
	<b>CHIMIPAL PE 56/N</b>	Ethoxylated - Propoxylated Fatty Alcohol	n.n.
	<b>CHIMIPAL PE 74/N</b>	Ethoxylated - Propoxylated Fatty Alcohol	n.n.
	<b>CHIMIPAL PE 403</b>	Ethoxylated - Propoxylated Fatty Alcohol	n.n.
	<b>EMANON® XLF</b>	Glycereth-7 Capylate/Caprates	361459-38-3
	<b>FINDET® 10/18</b>	Deceth-6	308061-30-5
	<b>FINDET® 1214N RANGE</b>	Laureth-n & Myreth-n	68439-50-9 (12 EO)
	<b>FINDET® AR/52</b>	PEG-40 Castor Oil	61791-12-6
	<b>FINDET® ARH/52</b>	PEG-40 Hydrogenated Castor Oil	61788-85-0
	<b>FINDET® SE-2411</b>	Polyoxyethylene and Polyoxypropylene Decyl Alcohol	68154-97-2
	<b>KAOPAN® TWL-120</b>	Polysorbate-20	9005-64-5
	<b>LEVENOL® C-421</b>	Glycereth-2 Cocoate	68201-46-7
	<b>LEVENOL® C-301</b>	Glycereth-7 Cocoate	68201-46-7
	<b>LEVENOL® C-201</b>	Glycereth-17 Cocoate	68201-46-7
	<b>LEVENOL® F-200</b>	Glycereth-6 Cocoate	68201-46-7
	<b>LibraCare APG 08</b>	Iso-Octyl Glucoside	161074-93-7
	<b>LibraCare APG 0810-70S</b>	Caprylyl/Capryl Glucoside	68515-73-1
	<b>LibraCare APG 1214</b>	Lauryl Glucoside	110615-47-9
	<b>Libranol CDG</b>	Coconut Diethanolamine	68155-07-7
	<b>Libranol RDG-LA</b>	Rapeseed Diethanolamide	68187-80-4
	<b>Libranox AO10-30 or AO10-40</b>	Decylamine Oxide	2605-79-0
	<b>OXIDET® DM-4</b>	Myristamine Oxide	3332-27-2
	<b>OXIDET® DM-20</b>	Lauramine Oxide	1643-20-5
	<b>OXIDET® DM-246</b>	Cocamine Oxide	308062-28-4
	<b>OXIDET® DMCLD</b>	Cocamine Oxide	308062-28-4
	<b>OXIDET® L-75 C</b>	Cocoamidopropylamine Oxide	68155-09-9
	<b>BETADET® SHR</b>	Cocamidopropyl Hydroxysultaine	68139-30-0
	<b>Librateric 110</b>	Coco Amphopropionate, Sodium Salt - 40% aqueous	93820-52-1
	<b>Librateric AA30</b>	Coco Imino Dipropionate - 30% Sodium Salt in Water	90170-43-7
	<b>Librateric BA-40</b>	2-Ethylhexyl Imino Dipropionate - 40% Sodium Salt in Water	94441-92-6
<b>Librateric BA-60</b>	2-Ethylhexyl Imino Dipropionate - 60% Sodium Salt in Water	94441-92-6	
<b>Librateric BA-70</b>	2-Ethylhexyl Imino Dipropionate - Potassium Salt in Water	90170-42-6	
<b>Librateric CAB 30 or 50</b>	Cocamidopropyl Betaine	97862-59-4	
Amphoterics	<b>Librateric CAT 50</b>	Coco aminodipropionate - triethanolamine salt 50% aqueous solution	14171-00-7
	<b>TETRANYL® AT-7590</b>	Partially Hydrogenated Tallow Esterquat	91995-81-2
	<b>TETRANYL® L1/90 S</b>	Partially Hydrogenated Tallow Esterquat	91995-81-2
	<b>TETRANYL® L6/90</b>	Partially Hydrogenated Palm Esterquat	91995-81-2
	<b>TETRANYL® AT-1</b>	Tallow Esterquat	93334-15-7
	<b>TETRANYL® AO-1</b>	Dioleoylethyl Hydroxyethylmonium Methosulfate	94095-35-9
	<b>TETRANYL® CO-40</b>	Dioleoylethyl Hydroxyethylmonium Methosulfate	94095-35-9
	<b>TETRANYL® DM-24</b>	Quaternary Ammonium Compounds, Alkyltrimethyl Methosulfate	96690-44-7
Biosurfactants	<b>TETRANYL® BC-50</b>	Benzalkonium Chloride	68424-85-1
	<b>HoneySurf® LF</b>	Sophorolipid	148409-20-5
	<b>HoneySurf® HF</b>	Sophorolipid	2102535-74-8

Local availability of products might differ from country to country.

# Properties

Active Matter %	Appearance (r.t.)	x EO	pH	Cloud / Pour Point °C	HLB Value	Chloride Content (%NaCl)	Density (r.t.)	CLP Classification	Biodegradability
≈ 38	Liquid		or 5.5 - 6.5				1.057	H315, H318	Aerobic
> 95	Solid		7.5 - 10.5				0.67 - 0.77	H302, H315, H318, H412	Aerobic + Anaerobic
≈ 70	Paste	2	7.0 - 9.0			< 0.10	1.11	H315, H318, H412	Aerobic + Anaerobic
≈ 27	Liquid	2	HP: 9.5 - 11.5; D/JM: 6.0 - 7.0			≤ 0.2	1.03	H315, H318, H412	Aerobic + Anaerobic
30	Liquid		≈ 5.0					none	Aerobic
≈ 48	Liquid/Paste		9.5 - 10.5				≈ 1.047 (30°C)	none	Aerobic + Anaerobic
≈ 70	Liquid		5.0 - 8.0	< 0			1.0	H226, H315, H318	Aerobic + Anaerobic
≈ 90	Liquid	5	2.0 - 3.5			≤ 1.0	1.05	H318	Aerobic
≈ 89	Liquid	8	1.5 - 2.5			≤ 1.2	1.05	H318	Aerobic + Anaerobic
≈ 89	Liquid	8/3	1.6 - 2.8			≤ 0.9	1.05	H315, H318	Aerobic + Anaerobic
≈ 87	Liquid	8/1	2.0 - 3.2			≤ 2.0	1.06	H318	Aerobic
≈ 92	Liquid	> 3	2.0 - 3.5			≤ 1.0	0.97 - 1.0	H318	Aerobic
≈ 92	Liquid	4.5	2.7 - 3.2			≤ 1.0	1.0 - 1.1	H318	Aerobic
≈ 100	Liquid		9.0 - 11.0				0.994	H315, H318, H411	Aerobic
≈ 95	Liquid	3	9.2 - 10.2				0.997	H315, H412	Aerobic + Anaerobic
100	Liquid		≈ 7	≈ 30			≈ 0.94	none	Aerobic
100	Liquid		≈ 7	≈ 11			≈ 0.97	none	Aerobic
100	Liquid		5.0 - 7.0	≈ 33			0.95 - 1.00	none	Aerobic
≈ 100	Liquid	7	5.0 - 7.0		≈ 17		≈ 1.124	H318	Aerobic + Anaerobic
≈ 100	Liquid	6	6.0 - 7.0	51 - 53	≈ 13		≈ 0.983	H302, H318	Aerobic
≈ 100	Liquid/Paste	n	6.0 - 8.0		≈ 8 - 14		≈ 0.9	H302, H318, H412 (12 EO)	Aerobic
≈ 100	Liquid	40	6.0 - 7.0		≈ 14		1.055	none	Aerobic
≈ 100	Soft Paste	40	6.0 - 7.0		≈ 14		1.04 (40°C)	none	Aerobic
≈ 100	Liquid		5.0 - 7.0	29 - 31			≈ 0.99 (30°C)	H412	Aerobic
≈ 100	Liquid	20	6.0 - 8.0		≈ 17		1.1	none	Aerobic
≈ 100	Liquid	2	6.0 - 8.0		≈ 11		≈ 1.080	none	Aerobic + Anaerobic
≈ 100	Liquid	7	5.0 - 7.0		≈ 14		≈ 1.040	none	Aerobic + Anaerobic
≈ 100	Liquid	17	5.0 - 7.0		≈ 13		1.04	none	Aerobic + Anaerobic
≈ 100	Liquid	6	5.0 - 7.0		≈ 15		1.08	none	Aerobic + Anaerobic
≈ 60	Liquid		7.0 - 9.0	< 0			1.170	H318	Aerobic
≈ 66	Liquid		7.0 - 9.0	< 0			1.15 - 1.17	H318	Aerobic
≈ 51	Liquid/Paste		11.5 - 12.5	> 25			1.07 - 1.11	H315, H318	Aerobic
> 81	Liquid/Paste		8.0 - 10.0	> 20			1.0	H315, H318, H411	Aerobic
> 81	Liquid/Paste		9.6 - 10.6	< 3			1.0	H315, H318, H411	Aerobic
≈ 30 or ≈ 40	Liquid		6.0 - 8.0	< 0			0.97	H302, H318, H400, H411	Aerobic
≈ 30	Liquid		6.5 - 8.5				0.959	H315, H318, H400, H411	Aerobic + Anaerobic
≈ 30	Liquid		6.0 - 8.0				0.973	H315, H318, H400, H411	Aerobic + Anaerobic
≈ 30	Liquid		6.0 - 7.0				≈ 0.966	H315, H318, H400, H411	Aerobic + Anaerobic
≈ 30	Liquid		6.0 - 8.0				0.965	H315, H318, H400, H411	Aerobic + Anaerobic
≈ 33	Liquid		6.5 - 7.5				0.99	H318	Aerobic + Anaerobic
≈ 44	Liquid		5.0 - 7.0			≤ 6.5	≈ 1.12	H319	Aerobic
≈ 40	Liquid		6.0 - 8.0	28 - 33			1.03 - 1.07	H317, H319	Aerobic
≈ 30	Liquid		7.5 - 9.5	40 - 50			1.03	H319	Aerobic
≈ 40	Liquid		8.2 - 8.8	45 - 50			1.075 - 1.095	none	Aerobic
≈ 60	Liquid		6.0 - 7.0	63 - 68			1.05 - 1.15	none	Aerobic
≈ 65	Liquid		8.2 - 8.8	65 - 70			1.128	none	Aerobic
30 or 50	Liquid		4.5 - 5.5			≤ 6.0 - 7.5	1.07	H318, H412	Aerobic + Anaerobic
49 - 52	Liquid		7.5 - 8.5	< 0			1.08	H319	Aerobic
≈ 90	Paste/Solid		2.0 - 3.0				0.9693 (50°C)	H226	Aerobic + Anaerobic
≈ 90	Paste/Solid		2.0 - 3.0				0.954 (50°C)	H226	Aerobic + Anaerobic
≈ 90	Paste/Solid		2.0 - 3.0				0.968 (50°C)	H226	Aerobic + Anaerobic
≈ 85	Liquid/Paste		2.0 - 3.0				0.958 (40°C)	H226	Aerobic + Anaerobic
≈ 90	Liquid		2.0 - 3.0				0.996	H226, H315, H319	Aerobic + Anaerobic
≈ 80	Liquid		2.0 - 3.0				1.01	H315, H319	Aerobic + Anaerobic
≈ 42	Liquid		7.0 - 9.0				1.02	H302, H315, H318	Aerobic + Anaerobic
≈ 50	Liquid		6.0 - 9.0				0.98	H290, H302, H314, H318, H400, H410	Aerobic
50-70	Liquid		5.0 - 7.0					H319	Aerobic. Anaerobic under investigation
50-70	Liquid		6.0 - 9.0					H319	Aerobic. Anaerobic under investigation

# Benefits

# Applications

Foaming	Thickening	Degreasing	Hydrotropic	Wetting	Emulsifying	Dispersing	Label Free	Compatibility				Liquid Detergent	Powder Detergent	Laundry Detergent	Softener	Hard Surface Cleaner	Vehicle Cleaning	Low-Foam Cleaner	Foam Cleaner	Trade Name
								Anionics	Non-ionics	Amphoterics	Cationics									
High																				ALFANOX® 46 or 46/BA
High				•	•	•		•	•	•		•			•				•	EMAL® 10 Range
High					•			•	•	•		•			•	•			•	EMAL® 270D
High					•			•	•	•		•			•	•			•	EMAL® 228 HP or D/JM
High				•	•		•	•	•	•		•			•				•	EUCAROL AGE/ET
High								•	•	•		•		•					•	ICTEOL® K-50E
				•		•		•	•	•					•	•				Libratex DOS70E
Low			•	•		•		•	•	•					•	•	•			AKYPO® LF 1
Low			•	•		•		•	•	•					•	•	•			AKYPO® LF 2
Low			•	•		•		•	•	•					•	•	•			AKYPO® LF 4
Low			•	•		•		•	•	•					•	•	•			AKYPO® LF 6
High						•		•	•	•		•			•	•			•	AKYPO® LM-40
High			•					•	•	•		•			•				•	AKYPO® RLM 45 CA
High	•				•			•	•	•		•			•	•			•	AMIDET® B-112
High	•				•			•	•	•		•			•	•			•	AMIDET® N
Low		•		•	•	•	•	•	•	•		•			•		•			CHIMIPAL PE 56/N
Low		•		•	•	•	•	•	•	•		•			•		•			CHIMIPAL PE 74/N
Low		•		•	•	•	•	•	•	•		•			•		•			CHIMIPAL PE 403
High				•	•			•	•	•		•			•		•		•	EMANON® XLF
		•		•	•	•		•	•	•		•			•	•	•			FINDET® 10/18
				•	•	•		•	•	•		•		•		•	•			FINDET® 1214N RANGE
					•	•	•	•	•	•		•			•	•				FINDET® AR/52
					•	•	•	•	•	•		•			•	•				FINDET® ARH/52
				•	•	•		•	•	•		•			•	•	•			FINDET® SE-2411
				•	•	•		•	•	•		•			•	•				KAOPAN® TWL-120
Medium	•			•	•			•	•	•		•	•		•				•	LEVENOL® C-421
Medium			•	•	•			•	•	•		•			•		•			LEVENOL® C-301
Low					•			•	•	•		•			•		•			LEVENOL® C-201
Medium		•	•	•	•		•	•	•	•		•	•		•		•			LEVENOL® F-200
Low		•	•	•		•		•	•	•		•			•		•			LibraCare APG 06
High		•	•	•		•		•	•	•		•	•	•	•	•			•	LibraCare APG 0810-70S
High		•	•	•		•		•	•	•		•	•	•	•	•			•	LibraCare APG 1214
High		•		•				•	•	•		•			•	•			•	Libranol CDG
High	•	•		•				•	•	•		•			•	•			•	Libranol RDG-LA
Low	•	•					•	•	•	•		•					•		•	Libranox AO10-30 or AO10-40
High	•	•						•	•	•		•			•	•			•	OXIDET® DM-4
High	•	•						•	•	•		•			•	•			•	OXIDET® DM-20
High	•	•						•	•	•		•			•	•			•	OXIDET® DM-246
High	•	•						•	•	•		•			•	•			•	OXIDET® DMCLD
High	•							•	•	•		•			•	•			•	OXIDET® L-75 C
High	•	•						•	•	•		•			•	•			•	BETADET® SHR
High								•	•	•		•			•	•			•	Librateric 110
High			•					•	•	•		•			•	•			•	Librateric AA30
Low			•	•				•	•	•		•			•	•	•			Librateric BA-40
Low			•	•				•	•	•		•			•	•	•			Librateric BA-60
Low			•	•				•	•	•		•			•	•	•			Librateric BA-70
High	•		•					•	•	•		•			•	•			•	Librateric CAB 30 or 50
High	•							•	•	•		•			•	•			•	Librateric CAT 50
									•	•			•							TETRANYL® AT-7590
									•	•			•							TETRANYL® L1/90 S
									•	•			•							TETRANYL® L6/90
									•	•			•							TETRANYL® AT-1
									•	•			•							TETRANYL® AO-1
									•	•			•							TETRANYL® CO-40
Medium		•	•		•			•	•	•		•			•	•				TETRANYL® DM-24
									•	•		•			•					TETRANYL® BC-50
Low		•		•		•		•	•	•		•		•	•	•				HoneySurf® LF
Medium		•	•	•		•		•	•	•		•			•	•	•			HoneySurf® HF

# Remarks

Details	Trade Name
46: preserved with bronopol; 46/BA: preserved with benzoic acid	<b>ALFANOX® 46 or 46/BA</b>
Suitable for EU ecolabel, Ecocert	<b>EMAL® 10 Range</b>
HP: preservative free, suitable for EU ecolabel, DIJM preserved with bronopol	<b>EMAL® 270D</b>
Suitable for EU ecolabel, Ecocert	<b>EMAL® 228 HP or D/JM</b>
Not stable in strong oxidising media, is hydrolysed by acids and alkalis but generally stable between pH 5-9; available in different solvents	<b>EUCAROL AGE/ET</b>
Alkali stability and solubility, stable against electrolytes; hard water stability, support of corrosion prevention; suitable for EU ecolabel with limitations	<b>ICTEOL® K-50E</b>
Alkali stability and solubility, stable against electrolytes; hard water stability, support of corrosion prevention; suitable for Ecolabel	<b>Libratex DOS70</b>
Alkali stability and solubility, stable against electrolytes; hard water stability, support of corrosion prevention; suitable for EU ecolabel	<b>AKYPO® LF 1</b>
Alkali stability and solubility, stable against electrolytes and hypochlorite; hydrolysis- and temperature stable; boost corrosion protection; suitable for EU ecolabel with limitations	<b>AKYPO® LF 2</b>
For high-foaming applications, suitable for EU ecolabel with limitations	<b>AKYPO® LF 4</b>
Suitable for EU ecolabel with limitations	<b>AKYPO® LF 6</b>
Free of nitrosamines; suitable for EU ecolabel	<b>AKYPO® LM-40</b>
	<b>AKYPO® RLM 45 CA</b>
	<b>AMIDET® B-112</b>
	<b>AMIDET® N</b>
	<b>CHIMIPAL PE 56/N</b>
	<b>CHIMIPAL PE 74/N</b>
	<b>CHIMIPAL PE 403</b>
Suitable for high-concentrated liquid detergents; suitable for EU ecolabel	<b>EMANON® XLF</b>
Suitable for EU ecolabel	<b>FINDET® 10/18</b>
Suitable for EU ecolabel	<b>FINDET® 1214N RANGE</b>
Solubilizer	<b>FINDET® AR/52</b>
Solubilizer	<b>FINDET® ARH/52</b>
Suitable for EU ecolabel	<b>FINDET® SE-2411</b>
Emulsifier, solubilizer	<b>KAOPAN® TWL-120</b>
Non-labelled for CLP; suitable for EU ecolabel, Ecocert	<b>LEVENOL® C-421</b>
Non-labelled for CLP; suitable for EU ecolabel, Ecocert	<b>LEVENOL® C-301</b>
Non-labelled for CLP; suitable for EU ecolabel, Ecocert	<b>LEVENOL® C-201</b>
Non-labelled for CLP; suitable for EU ecolabel, Ecocert	<b>LEVENOL® F-200</b>
Alkali stability and solubility, stable against electrolytes	<b>LibraCare APG 06</b>
Alkali stability and solubility, stable against electrolytes; suitable for EU ecolabel	<b>LibraCare APG 0810-70S</b>
Alkali stability and solubility, stable against electrolytes	<b>LibraCare APG 1214</b>
Alkali stability and solubility, stable against electrolytes	<b>Libranol CDG</b>
Alkali stability and solubility, stable against electrolytes	<b>Libranol RDG-LA</b>
Stable in acidic and alkaline formulations	<b>Libranox AO10-30 or AO10-40</b>
Perfume solubilizer, stable in presence of electrolytes and hard water	<b>OXIDET® DM-4</b>
Perfume solubilizer, stable in presence of electrolytes and hard water	<b>OXIDET® DM-20</b>
Perfume solubilizer, stable in presence of electrolytes and hard water	<b>OXIDET® DM-246</b>
Perfume solubilizer, stable in presence of electrolytes and hard water	<b>OXIDET® DMCLD</b>
Suitable for EU ecolabel	<b>OXIDET® L-75 C</b>
Stable at alkaline or acid conditions; suitable for EU ecolabel	<b>BETADET® SHR</b>
Salt free, stabiliser in acidic and alkaline solutions	<b>Librateric 110</b>
Salt free, stabiliser in acidic and alkaline solutions; synergistic effects with non-ionics	<b>Librateric AA30</b>
Salt free, stabiliser in acidic and alkaline solutions; synergistic effects with non-ionics; Nordic Swan approved for usage in Car and Boat care products	<b>Librateric BA-40</b>
Salt free, stabiliser in acidic and alkaline solutions; synergistic effects with non-ionics; Nordic Swan approved for usage in Car and Boat care products	<b>Librateric BA-60</b>
Salt free, stabiliser in acidic and alkaline solutions; synergistic effects with non-ionics; suitable for EU ecolabel	<b>Librateric BA-70</b>
Stable over a broad pH range and compatible with both anionic and cationic surfactants; unpreserved or preserved with sodium benzoate; readily biodegradable; suitable for Ecocert	<b>Librateric CAB 30 or 50</b>
Suitable Ecocert	<b>Librateric CAT 50</b>
Softening effect, antistatic effect; suitable for EU ecolabel	<b>TETRANYL® AT-7590</b>
Softening effect, antistatic effect; suitable for EU ecolabel	<b>TETRANYL® L1/90 S</b>
Softening effect, antistatic effect, vegetable origin; suitable for EU ecolabel, Ecocert	<b>TETRANYL® L6/90</b>
Softening effect, antistatic effect, low temperature process; suitable for EU ecolabel	<b>TETRANYL® AT-1</b>
Softening effect, antistatic effect, low temperature process, vegetable origin; suitable for EU ecolabel	<b>TETRANYL® AO-1</b>
Softening effect, antistatic effect, low temperature process	<b>TETRANYL® CO-40</b>
	<b>TETRANYL® DM-24</b>
Disinfectant	<b>TETRANYL® BC-50</b>
COSMOS- and Vegan-certified. Very mild to skin. Suitable for EU Ecolabel.	<b>HoneySurf® LF</b>
COSMOS- and Vegan-certified. Very mild to skin. Suitable for EU Ecolabel.	<b>HoneySurf® HF</b>

# Our Surfactant Partners



## Imprint

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