

Innovators in  
Surfactant Technology

Lankem 

Product Guide

[www.lankem.com](http://www.lankem.com)

## About us

Our primary focus is surfactant chemistry and application. We pride ourselves on being able to provide true expertise and assistance to help the formulator develop new products and technologies. We have a dedicated laboratory facility aimed at analysing and matching products and we also provide technical support to assist customer queries. We see this as key to the growth of the business and as a company, we continually develop new products to meet customer demands.

## Bespoke products

We offer a service to provide the customer with products that can be labelled in neutral markings. These products can either be re-brands or customer specific formulations. The packaged material will range from 25kg, 200kg, 1000kg IBC and bulk tanker.



## Our chemistries

All surfactants contain both a hydrophobic and a hydrophilic section, and as a combination of these two different characteristics within the molecule, many differing properties can be achieved. We have products that produce high or low foam. Some products offer excellent detergency and are used in cleaning formulations. We have surfactants that offer good emulsification of oils and monomers, in the case of emulsion polymerisation. We have some products that offer excellent wetting power and some that offer both wetting and dispersing properties. Products are available for each of the surfactant types, anionic, nonionic, cationic and amphoteric.



## Research and Development

With a dedicated laboratory facility, we are able to develop new products to meet our customers changing demands. Research and development are important to Lankem and with our expertise in the chemistries of surfactants we are able to produce new and novel products. As part of our technical support, we are able to offer product matches and provide project development assistance to our customers.



## Quality and the Environment

We view both quality and environmental compliance as essential components of the business. As expected we are a quality assured company with compliance in accordance with ISO9001 and with an excellent environmental profile, we have been certified to ISO14001. As a member of the Responsible Care programme, we are committed to managing the business both ethically and responsibly.

# Introducing a new concept

## The New BioLoop Surfactants



### BioLoop Surfactants - 100% bio-based

Product Name	Description	Appearance	Activity %	HLB	Cloud Point
<a href="#">BioLoop 56L</a>	100% Bio-based BioLoop	Liquid	100	10.8	56
<a href="#">BioLoop 68L</a>	100% Bio-based BioLoop	Liquid	80	13.2	68
<a href="#">BioLoop 84L</a>	100% Bio-based BioLoop	Liquid	75	14.9	84

### BioLoop Surfactants with hydrophilic tails

Product Name	Description	Appearance	Activity %	HLB	Cloud Point
BioLoop T45	BioLoop with hydrophilic tails	Liquid	100	14.1	34
<a href="#">BioLoop T65</a>	BioLoop with hydrophilic tails	Liquid	100	14.7	50
BioLoop T69	BioLoop with hydrophilic tails	Liquid	80	16.3	76

- **Totally New Chemistry**
- **Green technology for great sustainability**
- **A credible alternative to synthetic nonionics**
- **Biodegradable**
- **Very Low ecotoxicity**
- **No skin or eye irritancy**

# Anionic Surfactants

## Alkyl Benzene Sulphonic Acid and Salts

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf SBE acid</a>	Dodecyl benzene sulphonic acid	Liquid	100	1970	Class 8
<a href="#">Kemsurf SBE25</a>	Sodium dodecyl benzene sulphonate	Liquid	25	150	-
<a href="#">Kemsurf SBE30</a>	Sodium dodecyl benzene sulphonate	Liquid	30	6900	-
<a href="#">Kemsurf SX85</a>	Sodium dodecyl benzene sulphonate	Solid	85	-	-
<a href="#">Kemsurf CA</a>	Calcium dodecyl benzene sulphonate	Liquid	70	3025	Class 3
<a href="#">Kemsurf CA-EH</a>	Calcium dodecyl benzene sulphonate - 2EH	Liquid	60	1900	-
<a href="#">Kemsurf PWS</a>	Isopropylamine dodecyl benzene sulphonate	Liquid	92	4200	-

## Alpha Olefin Sulphonates

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf OS38</a>	Sodium C14 - 16 olefin sulphonate	Liquid	38	200	-

## Alkyl Sulphates

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf DSA</a>	Sodium lauryl sulphate	Liquid	28	100	-

## Alkyl Ether Sulphates

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf ASC</a>	Sodium laureth - 2 sulphate	Liquid	27	600	-
<a href="#">Kemsurf ESD</a>	Sodium laureth - 3 sulphate	Liquid	27	26	-
<a href="#">Kemsurf ESD60</a>	Sodium laureth - 3 sulphate	Liquid	60	210	Class 3
<a href="#">Kemsurf EM9</a>	Sodium laureth - 12 sulphate	Liquid	30	2000	-
<a href="#">Kemsurf EM30</a>	Lauryl + 30EO sulphate - Na salt	Liquid	30	90	-
<a href="#">Lanspec OF32</a>	Alky ether sulphate sodium salt	Liquid	32	50	-
<a href="#">Lanspec OF56</a>	Alky ether sulphate ammonium salt	Liquid	56	105	-
<a href="#">Lanspec OF65</a>	Alky ether sulphate ammonium salt	Liquid	56	90	-

## Fatty Acid and Fatty Acid Sulphonate

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf OPA</a>	Fatty acid sulphonate - potassium salt	Liquid	50	312	-

## Diocyl Sulphosuccinate

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Kemsurf OT60</a>	Sodium dioctyl sulphosuccinate - IMS / water	Liquid	60	43	Class 3
<a href="#">Kemsurf OT70G</a>	Sodium dioctyl sulphosuccinate - glycol	Liquid	70	1480	-

## Phosphate Esters - TPA

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Lanphos TE43</a>	Alcohol ethoxy phosphate - acid form	Liquid	100	2400	-
<a href="#">Lanphos TEP4</a>	Phenol + 4EO phosphate - acid form	Liquid	100	4200 #	-
<a href="#">Lanphos TEP4K</a>	Phenol + 4EO phosphate - potassium salt	Liquid	65	180	-

## Phosphate Esters - P2O5

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
<a href="#">Lanphos PET11</a>	Poly aryl ether phosphate - acid form	Liquid	100	4300	-
<a href="#">Lanphos PET22</a>	Poly aryl ether phosphate - triethanolamine salt	Liquid	100	4500	-
<a href="#">Lanphos PE35</a>	Tridecanol + 5EO phosphate ester - acid form	Liquid	100	943	-
<a href="#">Lanphos PE36</a>	C13 ethoxy phosphate ester - free acid	Liquid	100	221	-
<a href="#">Lanphos PE310</a>	Tridecanol + 10EO phosphate ester - acid form	Liquid	100	888	-
<a href="#">Lanphos PE74</a>	Cetyl oleyl ethoxy phosphate	Liquid	100	2500	-
<a href="#">Lanphos PS6-25A</a>	C13 + 6EO phosphate ester ammonia salt	Liquid	25	555	-
<a href="#">Lanphos PS10</a>	C13 + 10EO phosphate ester potassium salt	Liquid	25	1010	-

Viscosity measured in centipoise @20°C, # temperature @40°C

## Nonionic Surfactants

### C10 Alcohol Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf AE103</a>	C10 Alcohol + 3EO	Liquid	100	40	8	41 b10
<a href="#">Lansurf AE105</a>	C10 Alcohol + 5EO	Liquid	100	100	10	56 b10
<a href="#">Lansurf AE107</a>	C10 Alcohol + 7EO	Liquid	95	290	12	70 b10
<a href="#">Lansurf AE108W</a>	C10 Alcohol + 8EO	Liquid	80	55	14.5	56 w
<a href="#">Lansurf AE109W</a>	C10 Alcohol + 9EO	Liquid	80	100	14	69 w

### C13 Alcohol Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf AE33</a>	C13 Alcohol + 3EO	Liquid	100	50	9	36 b10
<a href="#">Lansurf AE35</a>	C13 Alcohol + 5EO	Liquid	100	80	10.5	60 b16
<a href="#">Lansurf AE37</a>	C13 Alcohol + 7EO	Liquid	100	100	12	70 b16
<a href="#">Lansurf AE310W</a>	C13 Alcohol + 10EO	Liquid	80	125	13.5	70 w
<a href="#">Lansurf AE312W</a>	C13 Alcohol + 12EO	Liquid	80	130	14.5	60 s
<a href="#">Lansurf AE315W</a>	C13 Alcohol + 15EO	Liquid	80	130	15.5	64 s
<a href="#">Lansurf AE320W</a>	C13 Alcohol + 20EO	Liquid	80	150	16.5	73 s

### Cetyl Oleyl Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
Lansurf AE73	Cetyl oleyl + 3EO	Liquid	100	57	6.8	56 b10
Lansurf AE735	Cetyl oleyl + 35EO	Solid	100	-	17	78 s

## Alcohol EO/PO

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf AEP63</a>	Synthetic alcohol EO/PO	Liquid	95	64	-	41 w
<a href="#">Lansurf AEP66</a>	Synthetic alcohol EO/PO	Liquid	95	114	-	33 w

## EO/PO Block Polymers

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf DPE201</a>	Diol EO/PO block polymer-2000 mwt	Liquid	100	390	-	34 b16
<a href="#">Lansurf DPE253</a>	Diol EO/PO block polymer-2500 mwt	Liquid	100	650	-	59 b16
<a href="#">Lansurf DPE808</a>	Diol EO/PO block polymer-8000 mwt	Solid	100	-	-	88 s

## Sorbitan Esters

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf SMO</a>	Sorbitan mono-oleate	Liquid	100	1100	4.3	NA
<a href="#">Lansurf STO</a>	Sorbitan tri-oleate	Liquid	100	230	1.8	NA
<a href="#">Lansurf SMS</a>	Sorbitan mono-stearate	Solid	100	-	4.7	NA
<a href="#">Lansurf SML</a>	Sorbitan mono-laurate	Liquid	100	5250	8	NA

## Sorbitan Ester Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf SMO81</a>	Sorbitan mono-oleate + 5EO	Liquid	100	465	10	◇
<a href="#">Lansurf SMO80</a>	Sorbitan mono-oleate + 20EO	Liquid	100	720	15	67 s
<a href="#">Lansurf STO85</a>	Sorbitan tri-oleate + 20EO	Liquid	100	270	11	◇
<a href="#">Lansurf SMS60</a>	Sorbitan mono-stearate + 20EO	Liquid / Paste	100	190 #	15	53 s
<a href="#">Lansurf SML20</a>	Sorbitan mono-laurate + 20EO	Liquid	100	350	16.5	70 s

## Tallow Amine Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf TA15</a>	Tallow amine + 15EO	Liquid	100	252	14.2	53 b10
<a href="#">Lansurf TH30W</a>	Tallow amine + 30EO	Liquid	85	1170	16.6	88 s



## Castor Oil Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
<a href="#">Lansurf CO12</a>	Castor oil + 12EO	Liquid	100	500	7	52 b10
<a href="#">Lansurf CO40</a>	Castor oil + 40EO	Liquid / Paste	100	357 #	13.5	70 b16

## Oleic Acid Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf OA7</a>	Oleic acid + 7EO	Liquid	100	84	10.4	63 b10
<a href="#">Lansurf OA10</a>	Oleic acid + 10EO	Liquid	100	120	11.8	67 b10
<a href="#">Lansurf OA14</a>	Oleic acid + 14EO	Liquid	100	340	13.6	42 w

## Phenol Ethoxylate

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf P4</a>	Phenol + 4EO	Liquid	100	64	-	67 *

## Fatty Acid Alkonamides

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf CDE</a>	Coconut diethanolamide	Liquid	100	1408	-	NA
<a href="#">Lansurf CDE-G</a>	Coconut diethanolamide - glycerol	Liquid	100	1303	-	NA

## Amine Oxides

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
<a href="#">Lansurf CAO</a>	Lauryl amine oxide	Liquid	30	100	-	NA
<a href="#">Lansurf CAPO</a>	Cocoamidopropyl amine oxide	Liquid	30	120	-	NA

Appearance assessed @25°C

Viscosity measured in centipoise @20°C, # temperature @40°C

Cloud Point test : w : 1g in 100g water  
 S : 1g in Sodium Chloride Solution (10%)  
 b10 : 10% in BDG Solution (25%)  
 b16 : 16.6% in BDG Solution (25%)  
 \* : 10% aqueous  
 NA : none available  
 ◇ : material not soluble in water



## Amphoteric & Cationic Surfactants

### Betaines

Product Name	Description	Appearance	Activity %	Viscosity
<a href="#">Amphokem CAB</a>	Lauryl betaine	Liquid	30	40
<a href="#">Amphokem CAPB</a>	Cocoamidopropyl betaine	Liquid	30	20

### Dipropionates

Product Name	Description	Appearance	Activity %	Viscosity
<a href="#">Amphokem CADP</a>	Sodium cocoiminodipropionates	Liquid	30	132

### Imidazoline

Product Name	Description	Appearance	Activity %	Viscosity
<a href="#">Lanspec OC100</a>	Tall Oil Fatty Acid Imidazoline	Liquid	100	200
<a href="#">Lanspec OC200</a>	Tall Oil Fatty Acid Imidazoline	Liquid	100	600

### Quaternary Ammonium Compound

Product Name	Description	Appearance	Activity %	Viscosity
<a href="#">Lanquat CAE</a>	Quaternised fatty amine ethoxylate	Liquid	100	400

# Surfactants for Agrochemicals

## Emulsifiable Concentrates - Anionics

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Kemsurf PWS</a>	Isopropylamine dodecyl benzene sulphonate	Liquid	92	4200	920:930
<a href="#">Kemsurf CA</a>	Calcium dodecyl benzene sulphonate	Liquid	70	3025	910:930
<a href="#">Lanwet JH1</a>	Substrate Wetter	Liquid	70	1480	910:930

## Emulsifiable Concentrates - Nonionics

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf NEC15T</a>	Tristyrylphenol ethoxylate	Liquid	100	1520	920
<a href="#">Agrosurf NEC12</a>	Castor oil + 12EO	Liquid	100	884	960
<a href="#">Agrosurf NEC32</a>	Alcohol ethoxylate	Liquid	80	125	920:930:960
<a href="#">Agrosurf NEC38</a>	Alcohol ethoxylate	Liquid	90	130	920:930:960
<a href="#">Agrosurf NEC40</a>	Castor oil + 40EO	Liquid/Paste	100	357 #	960
<a href="#">Lansurf DPE253</a>	Diol EO/PO block polymer - 2500 mwt	Liquid	100	650	960

## Emulsifiable Concentrates - Balanced Pair

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf BPE148</a>	Nonionic / anionic emulsifier	Liquid	68	3025	910
<a href="#">Agrosurf BPE211</a>	Nonionic / anionic emulsifier	Liquid	93	1003	910
<a href="#">Agrosurf BPE148-EH</a>	Nonionic / anionic emulsifier	Liquid	68	-	910
<a href="#">Agrosurf BPE211-EH</a>	Nonionic / anionic emulsifier	Liquid	92	632	910

## Stabilisers for Emulsifiable Concentrates

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf GF</a>	Epoxidised soyabean oil	Liquid	100	350	910:930

## Suspension Concentrates

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Lanphos PET22</a>	Tristyrylphenol ether phosphate TEA salt	Liquid	80	1400	920
<a href="#">Lanphos PE35</a>	Alkyl ether phosphate - acid form	Liquid	100	3200	910:920:930

## Dispersing Agents

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Lansperse DIS145</a>	Sodium naphthalene sulphonate	Powder	92	-	910:920
<a href="#">Lanphos PET22</a>	Tristyrylphenol ether phosphate TEA salt	Liquid	80	1400	920
<a href="#">Agrosurf NEC15T</a>	Tristyrylphenol + 15EO	Liquid	80	300	920

## Wetting Agents

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf WP66</a>	Alcohol EO/PO	Liquid	95	114	910:930:960
<a href="#">Agrosurf WP35</a>	Alcohol ethoxylate	Liquid	84	100	910:930:960
<a href="#">Agrosurf WP85</a>	Sodium dodecyl benzene sulphonate	Solid	85	-	910 : 930
<a href="#">Lanwet JH1</a>	Substrate Wetter	Liquid	70	1480	910 : 930

## Activity Optimisers - Adjuvants

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf AOP40</a>	Formulated adjuvant	Liquid	100	-	-

## Compatibility Agents

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf CMP125</a>	Phosphate ester - acid form	Liquid	70	475	920
<a href="#">Agrosurf CMP147</a>	Phosphate ester - potassium salt	Liquid	65	180	-

## Microemulsions

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf ME30</a>	Proprietary blend	Liquid	90	90	910
<a href="#">Agrosurf ME100</a>	Proprietary blend	Liquid	100	960	920

## Co-solvent

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
<a href="#">Agrosurf COS4</a>	Phenol + 4EO	Liquid	100	64	-

Viscosity measured in centipoise @20°C, Appearance @25°C, EPA Status: exempt from tolerance under EPA regulation 40 CFR 180 - sections indicated # temperature @40°C

# Coatings Additives

## Conventional Product Range for Aqueous Systems

### Dispersing Agents

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse DS200W</a>	Organic pigment dispersions, paints and inks	Liquid	80
<a href="#">Lansperse DS80</a>	Co-dispersant with Lansperse DS200W	Liquid	80

### Humectant

Product Name	Application Summary	Appearance	Activity %
Kemectant EB3	A humectant to prevent in can drying in paints and liquid dispersions	Liquid	84

### Defoamer

Product Name	Application Summary	Appearance	Activity %
<a href="#">Dfoam AX1</a>	A mineral oil based defoamer aimed at aqueous based paint formulations	Liquid	100
<a href="#">Dfoam AR2</a>	A mineral oil defoamer aimed at pigment dispersions	Liquid	100

### Wetting Agent

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lanwet JH1</a>	An extremely powerful wetting agent	Liquid	70

## New Hyperdispersants for Solvent and UV Cured Systems

### Solvent Based Systems

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse SL18</a>	Hyperdispersant for Whites (TiO <sub>2</sub> ), Blacks and organic Reds, Yellows Blues (Lansperse SYN50 Synergist used)	Liquid	35
<a href="#">Lansperse SL18-HA</a>	High active version of Lansperse SL18	Solid	100

### UV Curable Systems

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse UV51</a>	Hyperdispersant for Whites (TiO <sub>2</sub> ), Blacks and organic Reds, Yellows Blues (Lansperse SYN50 Synergist used)	Solid	100

## BioLoop Dispersing Agents

### Aqueous Based Systems

#### BioLoop Dispersants

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse LT87</a>	Organic pigment dispersions, paints and inks	Liquid	80
<a href="#">Lansperse BA6</a>	Organic pigment dispersions, paints and inks	Liquid	40
<a href="#">Lansperse BIO868 *</a>	Inorganic pigments and powder dispersions	Liquid	80

### UV Curable Systems

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse UV86</a>	Bio-loop dispersant for Yellows - no synergist required	Solid	100

\*A non bio-based chemical alternative is available called Lansperse 868 in systems where environmental profiling isn't essential.

## Synergists for Solvent and UV Cured Systems

### Synergists for UV and Solvent Systems

Product Name	Application Summary	Appearance	Activity %
<a href="#">Lansperse SYN50</a>	Synergist for phthalocyanine Blues	Powder	100

# Emulsion Polymerisation

Anionics	Vinyl Acetate	Vinyl Acetate Acrylic	Vinyl Acetate VeoVa	Vinyl Chloride	Vinyldiene plus Copolymers	Acrylamide
Kemsurf ESD		✓★	✓★			
Kemsurf ESD60		✓★	✓★			
Kemsurf SBE30		✓★		✓	✓	
Lanphos PS6-25A						
Lanphos PS10						
Kemsurf DSA				✓	✓	
Kemsurf OS38	✓					
Kemsurf OT60		✓★		✓		
Kemsurf EM9						
Kemsurf EM30	✓					
★ Requires a stabiliser						
Nonionics	* mainly used as emulsion stabilisers after emulsification stage					
Lanspec EMP208 *		✓				
Lanspec EMP404 *			✓			
Lanspec HSR *			✓			
Lansurf SMO						✓

Anionics	Styrene	Styrene Acrylic	Styrene Butadiene	Acrylic Monomers	Styrene Butadiene Acrylonitrile
Kemsurf ESD					
Kemsurf ESD60					
Kemsurf SBE30	✓	✓★	✓		✓
Lanphos PS6-25A		✓		✓	
Lanphos PS10		✓		✓	
Kemsurf DSA	✓				✓
Kemsurf OS38		✓			
Kemsurf OT60					
Kemsurf EM9	✓				
Kemsurf EM30	✓				
★ Requires a stabiliser					
Nonionics	* mainly used as emulsion stabilisers after emulsification stage				
Lanspec EMP208 *					
Lanspec EMP404 *		✓			
Lanspec HSR *		✓			
Lansurf SMO					



Extensive Global Supply Chain



