Innovators in Surfactant Technology





Expertise in Surfactant Technology





Lankem founded in 1999 is a rapidly expanding business supplying surfactant products to industrial markets such as coatings, emulsion polymerisation, agrochemicals, textiles, oils and lubricants and industrial cleaning. In recent years we have shifted our focus on the development of novel biobased surfactants and have introduced the new BioLoop surfactants. Our primary business focus is surfactant technology in which we provide true expertise and advice to the formulator. With an on-site laboratory facility and production lines, we are able to offer both conventional and unique surfactant products.

Expertise in surfactant technology

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 technical support as key to the growth of the business, and as a company, we continually develop new products to meet customer demands.

Our chemistries

Surfactants contain both a hydrophobic and a hydrophilic section, and as a combination of these two different characteristics within the molecule, many different 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.

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.

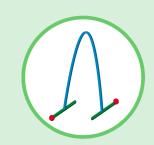
Global player

A network of both agents and sales offices are in place to offer support to all global regions. The head office is located in the UK, with a sales office located in Ireland to support the European business and a sales office in the US to support the North America business.

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. Our Occupational Health and Safety Management System is certified to the ISO45001 standard.







Soyabean Variants

PG (Pure Grade) v Normal Grade

The normal grade of BioLoop surfactants are aimed at standard industrial-based processes in which clarity in an aqueous medium isn't a necessity. The PG versions which denotes our purified grades are for industries in which clarity in aqueous mediums is essential.

Key Features

- Based on BioLoop technology
- Renewable carbon index > 98%
- Ultra-mild
- No skin or eye irritancy
- Low ecotoxicity
- Biodegradable
- A green alternative to conventional dispersing agents
- Hazard label free

BioLoop Surfactants - Normal Grade

Product Name	Description	Appearance	Activity %	HLB	Cloud Point
BioLoop 56L	Biobased BioLoop Surfactant	Liquid	100	10.8	56
BioLoop 68L	Biobased BioLoop Surfactant	Liquid	80	13.2	68
BioLoop 84L	Biobased BioLoop Surfactant	Liquid	75	14.9	84

BioLoop Surfactants - Pure Grade

Product Name	Description	Appearance	Activity %	HLB	Cloud Point
BioLoop 56L-PG	Biobased BioLoop Surfactant	Liquid	100	10.8	56
BioLoop 68L-PG	Biobased BioLoop Surfactant	Liquid	80	13.2	68
BioLoop 84L-PG	Biobased BioLoop Surfactant	Liquid	75	14.9	84

Rapeseed Variants

BioLoop Surfactants - Normal Grade

Product Name	Description	Appearance	Activity %	HLB	Cloud Point
BioLoop RPS56L	Biobased BioLoop Surfactant	Liquid	100	10.5	44.27
BioLoop RPS68L	Biobased BioLoop Surfactant	Liquid	80	130	57.66
BioLoop RPS84L	Biobased BioLoop Surfactant	Liquid	75	14.7	77

Anionic Surfactants

Anionic surfactants are negatively charged materials that are available in a variety of chemical types. The main classes being alkyl ether sulfates, alkyl sulfates, alkylbenzene sulfonates, alpha olefin sulfonates, phosphate esters. They are used in a wide range of applications where they provide useful characteristics including, emulsification, solubilisation, wetting, detergency, dispersion and foaming.



Alkyl Benzene Sulphonic Acid and Salts

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

Alpha Olefin Sulphonates

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
Kemsurf OS38	Sodium C14 - 16 olefin sulphonate	Liquid	38	200	-

Alkyl Sulphates

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
Kemsurf DSA	Sodium lauryl sulphate	Liquid	28	100	-

Alkyl Ether Sulphates

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

Fatty Acid and Fatty Acid Sulphonate

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
Kemsurf OPA	Fatty acid sulphonate - potassium salt	Liquid	50	312	-

Dioctyl Sulphosuccinate

Product Name	Description	Appearance	Activity %	Viscosity	Hazard
Kemsurf OT60	Sodium dioctyl sulphosuccinate - IMS / water	Liquid	60	43	Class 3
Kemsurf OT70-G	Sodium dioctyl sulphosuccinate - glycol	Liquid	70	1480	-

Phosphate Esters - TPA

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

Phosphate Esters - P2O5

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

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

Nonionic Surfactants

Nonionic surfactants carry no electrical charge and are available in a variety of chemical types. The main classes are alcohol ethoxylates, alcohol ethoxylates / propoxylates, ethylene oxide-propylene oxide copolymers, castor oil ethoxylates, amine ethoxylates, fatty acid esters and their ethoxylates. They are used in a wide range of applications where they provide useful characteristics including emulsification, solubilisation, wetting, dispersion, detergency, foaming and defoaming.



C10 Alcohol Ethoxylates

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

C13 Alcohol Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
Lansurf AE33	C13 alcohol + 3EO	Liquid	100	50	9	36 b10
Lansurf AE35	C13 alcohol + 5EO	Liquid	100	80	10.5	60 b16
Lansurf AE37	C13 alcohol + 7EO	Liquid	100	100	12	70 b16
Lansurf AE310W	C13 alcohol + 10EO	Liquid	80	125	13.5	70 w
Lansurf AE312W	C13 alcohol + 12EO	Liquid	80	130	14.5	60 s
Lansurf AE315W	C13 alcohol + 15EO	Liquid	80	130	15.5	64 s
Lansurf AE320W	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
Lansurf AEP63	Synthetic alcohol EO / PO	Liquid	95	64	-	41 w
Lansurf AEP66	Synthetic alcohol EO / PO	Liquid	95	114	-	33 w

EO / PO Block Polymers

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

Sorbitan Esters

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

Sorbitan Ester Ethoxylates

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

Tallow Amine Ethoxylates

Product Name	Description	Appearance	Activity %	Viscosity *	HLB	Cloud Point
Lansurf TA15	Tallow amine + 15EO	Liquid	100	252	14.2	53 b10
Lansurf TH30W	Tallow amine + 30EO	Liquid	80	1170	16.6	88 s

Castor Oil Ethoxylates

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

Oleic Acid Ethoxylates

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

Phenol Ethoxylate

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
Lansurf P4	Phenol + 4EO	Liquid	100	64	-	67 *

Fatty Acid Alkonamides

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
Lansurf CDE	Coconut diethanolamide	Liquid	100	1408	-	NA
Lansurf CDE-G	Coconut diethanolamide - glycerol	Liquid	100	1303	-	NA

Amine Oxides

Product Name	Description	Appearance	Activity %	Viscosity	HLB	Cloud Point
Lansurf CAO	Lauryl amine oxide	Liquid	30	100	-	NA
Lansurf CAPO	Cocoamidoproply amine oxide	Liquid	30	120	-	NA

Appearance assessed at 25°C

Viscosity measured in centipoise at 20°C, # temperature at 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

o: material not soluble in water

Amphoteric & Cationic Surfactants

Amphoteric surfactants can carry a positive or negative charge depending on pH, whereas cationic surfactants carry a positive charge. There are a number of chemical types for amphoteric surfactants including betaines, amidopropyl betaines, alkylamino dipropionates. They are used in a wide range of applications where they provide useful characteristics such as foaming, solubilisation, antistatic.



Betaines

Product Name	Description	Appearance	Activity %	Viscosity
Amphokem CAB	Lauryl betaine	Liquid	30	40
Amphokem CAPB	Cocoamidopropyl betaine	Liquid	30	20

Dipropionates

Product Name	Description	Appearance	Activity %	Viscosity
Amphokem CADP	Sodium cocoiminodipropionates	Liquid	30	132

Imidazoline

Product Name	Description	Appearance	Activity %	Viscosity
Lanspec OC100	Tall oil fatty acid imidazoline	Liquid	100	200
Lanspec OC200	Tall oil fatty acid imidazoline	Liquid	100	600

Quaternary Ammonium Compound

Product Name	Description	Appearance	Activity %	Viscosity
Lanquat CAE	Quaternised fatty amine ethoxylate	Liquid	100	400

Surfactants for Agrochemicals

Surfactants are important components used in the preparation of agrochemicals formulations, they provide a broad range of essential properties including:

Emulsification
Dispersion
Wetting
Compatibilization
Activity Enhancement

Emlusifiable Concentrates - Anionics

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Kemsurf PWS	Isopropylamine dodecyl benzene sulphonate	Liquid	92	4200	920:930
Kemsurf CA	Calcium dodecyl benzene sulphonate	Liquid	70	3025	910:930
Lanwet JH1	Substrate wetter	Liquid	70	1480	910:930

Emulsifiable Concentrates - Nonionics

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

Emulsifiable Concentrates - Balanced Pair

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf BPE148	Nonionic / anionic emulsifier	Liquid	68	3025	910
Agrosurf BPE211	Nonionic / anionic emulsifier	Liquid	93	1003	910
Agrosurf BPE148-EH	Nonionic / anionic emulsifier	Liquid	68	-	910
Agrosurf BPE211-EH	Nonionic / anionic emulsifier	Liquid	92	632	910

Stabilisers for Emulsifiable Concentrates

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf GF	Epoxidised soyabean oil	Liquid	100	350	910:930

Suspension Concentrates

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Lanphos PET22	Tristyrylphenol ether phosphate TEA salt	Liquid	80	1400	920
Lanphos PE35	Alkyl ether phosphate - acid form	Liquid	100	3200	910:920:930

Dispersing Agents

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

Wetting Agents

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

Activity Optimisers - Adjuvants

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf AOP40	Formulated adjuvant	Liquid	100	-	-

Compatibility Agents

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf CMP125	Phosphate ester - acid form	Liquid	70	475	920
Agrosurf CMP147	Phosphate ester - potassium salt	Liquid	65	180	-

Microemulsions

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf ME30	Proprietary blend	Liquid	90	90	910
Agrosurf ME100	Proprietary blend	Liquid	100	960	920

Co-solvent

Product Name	Description	Appearance	Activity %	Viscosity	EPA Status
Agrosurf COS4	Phenol + 4EO	Liquid	100	64	-

Coatings Additives



We have developed a range of biobased surfactants using our newly patented BioLoop technology, in which the molecule has two hydrophobes, based on either soya or rapeseed, that are then connected with a hydrophilic loop originating from molasses. The two hydrophobes help to achieve maximum bonding and spacing on the particle surface to deliver superior stability and dispersing properties.

Biobased Dispersing Agents

Soyabean Variants

Soyabean is from a sustainable crop and is readily available. The Lansperse BIO691 is unique as it is soluble in both aqueous and organic solvents, and so can be used in universal tinting formulations. Both Lansperse BIO801 and BIO868 are dispersing agents for aqueous systems.

Lansperse BIO691

Lansperse BIO801

Lansperse BIO868

Rapeseed Variants

Rapeseed is a good sustainable crop with no environmental concerns. This range of products will be specifically ideal for dispersions in the cosmetics and personal care industries.

Lansperse RPS11

Lansperse RPS25

Lansperse RPS43



Biobased Dispersing Agents for Aqueous - Soyabean Variants

Product Name	Application Summary	Appearance	Activity %
Lansperse BIO691	A BioLoop dispersing agent - stable in both aqueous and solvent systems	Liquid	100
Lansperse BIO801	A BioLoop dispersing agent	Liquid	80
Lansperse BIO868	A BioLoop dispersing agent	Liquid	75
Lansperse BA6	A BioLoop dispersing agent - cationic in nature	Liquid	40

Biobased Dispersing Agents for Aqueous - Rapeseed Variants

Product Name	Application Summary	Appearance	Activity %
Lansperse RPS11	A BioLoop dispersing agent	Liquid	100
Lansperse RPS25	A BioLoop dispersing agent	Liquid	80
Lansperse RPS43	A BioLoop dispersing agent	Liquid	75

Dispersing Agents for Aqueous Systems - Conventional Types

Product Name	Application Summary	Appearance	Activity %
Lansperse LT87	Organic and inorganic pigment dispersions, paints and inks - neutral SDS	Liquid	80
Lansperse DS200W	Organic and inorganic pigment dispersions, paints and inks - nonionic	Liquid	80
Lansperse DS80	Co-dispersant with Lansperse DS200W - anionic	Liquid	80
Lansperse SPA	Mainly inorganic pigment dispersions and titanium dioxide	Liquid	40

Dispersing Agents for Solvent Systems

Product Name	Application Summary	Appearance	Activity %
Lansperse SL58	A wide range of pigments such as black, blue 15, yellow 42, yellow 74 and white	Liquid	100
Lansperse SL66	A wide range of pigments such as red 101, red 57.1, blue 15 and yellow 42	Liquid	100

Dispersing Agents for UV Curable Systems

Product Name	Application Summary	Appearance	Activity %
Lanspserse UV51	Hyperdispersant for whites blacks and organic reds, yellows, blues	Liquid	50
Lansperse UV93	A hyperdispersant for a wide range of pigment types	Liquid	100

Dispersing Agent for Universal Systems

Product Name	Application Summary	Appearance	Activity %
Lansperse BIO691	A biobased dispersing agent soluble in aqueous and solvent systems	Liquid	100

Compatibility Agent for Dispersions

Product Name	Application Summary	Appearance	Activity %
Lansperse UT57	Helps to improve the colour strength and reduces flocculation problems of existing pigment dispersion and paint formulations	Liquid	100

Substrate Wetter

Product Name	Application Summary	Appearance	Activity %
Lanwet JH1	An extremely powerful wetting agent for aqueous systems	Liquid	70
Lansperse BIO691	A biobased substrate wetter - see guide	Liquid	100

Defoamer

Product Name	Application Summary	Appearance	Activity %
Dfoam AX1	A mineral oil based defoamer	Liquid	100
Dfoam AR2	A mineral oil defoamer with additional hydrophobic particles	Liquid	100

Humectant

Product Name	Application Summary	Appearance	Activity %
Kemectant EB3	Prevents in-can drying increases the open time and improves the freeze-thaw stability	Liquid	80

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 nonionic stabiliser							
Nonionics							
Lanspec EMP208		✓					
Lanspec EMP404			✓				
Lanspec HSR			✓				
Lansurf SMO						✓	

Anionics	Styrene	Styrene Acrylic	Styrene Butadiene	Acrylic Monomers	Styrene Butadiene Acylonitrile		
Kemsurf ESD							
Kemsurf ESD60							
Kemsurf SBE30	✓	√ ★	✓		✓		
Lanphos PS6-25A		✓		✓			
Lanphos PS10		✓		✓			
Kemsurf DSA	✓				✓		
Kemsurf OS38		✓					
Kemsurf OT60							
Kemsurf EM9	✓						
Kemsurf EM30	✓						
* Requires a nonionic stabiliser							
Nonionics							
Lanspec EMP404 *		✓					
Lanspec HSR *		✓					



