



**HARKE**

HomeCare  
I&I  
AutomotiveCare



# HARKE HomeCare, I&I, AutomotiveCare

HARKE GROUP Home & PersonalCare, I&I Division



ONE PARTNER.  
ONE RESPONSIBILITY.



HomeCare, I&I, AutomotiveCare



## One Partner. One Responsibility.

### HARKE GROUP

is a family-owned, international group, offering speciality materials, technical support and customized solutions, including formulating, blending and contract packaging for technical applications.

### HARKE HomeCare, I&I, AutomotiveCare

are business units of HARKE GROUP active in the field of the cleaning and detergent industry.

HARKE HomeCare, I&I and AutomotiveCare stands for several years of experience in the distribution of raw materials for these industries. We offer innovative products from international principals and assist you concerning the formulation of new products. Our team is always up to date on the latest trends and new raw materials.



Thorsten Harke | President HARKE GROUP



Jens Prinssen  
Board Member Home & PersonalCare, I&I  
Managing Director HARKE Chemicals GmbH

### HARKE GROUP Home & PersonalCare, I&I Division

- HARKE HomeCare
- HARKE PersonalCare
- HARKE I&I
- HARKE AutomotiveCare

# Facts & Figures

## HARKE GROUP



## HARKE DIVISIONS



## HARKE HOME & PERSONALCARE, I&I



## WORLDWIDE ASSISTANCE

With offices across many European countries and in India, we are able to offer our Partners a local presence. Using local languages, our experts are able to provide advice and assistance, anywhere and at any time.



- Headquarters
- Subsidiaries
- Production/Storage
- Sales Offices



# Our Services

## #OnePartnerOneResponsibility

Depending on your needs we can take over the responsibility of the full value chain for you from product development over raw material supply, mixing, blending, packaging until the final product.



### COMMERCIAL EXCELLENCE



With more than 40 years experience in the distribution of cosmetic raw materials, we put your individual requirements in the heart of our activities.

### EXHIBITIONS & CONGRESSES



You can meet our team on all local and international trade shows across the globe. We welcome you to visit us to learn more about our possibilities and to discuss new projects.



### TECHNICAL SUPPORT

We offer excellence in technical service in many application areas. We assist your projects from kickoff to the commercial implementation with R&D support, development of innovative concepts and supply of scientific data. Our experienced technical team is at your disposal for formulation advice and solving your problems.



### CUSTOMIZED SOLUTIONS

With several years of experience in the worldwide distribution of raw materials for the cosmetic industry, we focus on our customer needs. We support you with the full technical and commercial services, from the sourcing of raw materials to the development of formulations. Transparent communication, minimizing costs and enhancing your benefits – that is our contribution to your success.



### SUPPLY CHAIN MANAGEMENT

Our logistics and customer service teams consider themselves as a part of your value chain. We guarantee batch traceability supported by SAP/ R3. You can count on a qualified supply chain as we use approved warehouse and transport partners only. We offer specific logistic solutions, e.g. just-in-time deliveries, short lead times and consignment stock.

PRODUCTS BY APPLICATIONS

	AIR CARE	p. 8
	AUTOMATIC DISHWASH	p. 12
	HAND DISHWASH	p. 15
	FABRIC CARE	p. 18
	HARD SURFACE CLEANING	p. 24
	AUTOMOTIVE CARE	p. 32
	CARPET CARE	p. 36
	HYGIENE	p. 38
	OUR COMMITMENT TO SUSTAINABILITY	p. 41
	PRODUCTS BY CATEGORIES A - Z	p. 42
	OUR PARTNERS & PRODUCTS	p. 44



RCI % > 60



RSPO "Roundtable On Sustainable Palm Oil" mass balance quality available



Only coconut oil feedstock

# Products by Application



## AIR CARE




Additive	Chemical Name	Benefit
<b>Flexisorb™ OD-120ZnR</b>	Zinc Ricinoleate 20% Active	Concentrated chelate-free zinc salt dispersion <b>readily dilutes in water</b> . Maintains excellent clarity down to 5% as supplied, with excellent cold temperature stability.
<b>Flexisorb™ OD-202</b>	Zinc Ricinoleate 5% Active	Concentrated zinc salt dispersion with <b>anti-resoil</b> ingredients readily dilutes in water, is formulated with soil and stain resist agents that prevent sticky and tacky residues that attract soil on carpeting and upholstery.
<b>Flexisorb™ OD-300</b>	Zinc Ricinoleate 30% Active	Highly concentrated zinc salt dispersion readily forms a microemulsion when diluted in water. Effective against smelly acids, amines, mercaptans and thioethers, including hydrogen sulfide and ammonia. Use as a <b>stand alone odor control agent</b> , or as an additive in hard and soft surface cleaning formulations
<b>Flexisorb™ OD-500</b>	Zinc Ricinoleate 50% Active	Highly concentrated zinc salt dispersion soluble in alcohol and polar organic solvents, and in aqueous surfactant mixtures. <b>High actives, low moisture complex</b> , requires additional stabilizing ingredients.
<b>Flexisorb™ OD-P</b>	Zinc Ricinoleate 100% Active	<b>High-Actives solid</b> soluble in alcohol and polar organic solvents, in aqueous surfactant mixtures, pastilles for easy and convenient handling.






<b>HARKE Surf SME</b>	Soyethyl Morpholinium Ethosulfate	Cationic surfactant that neutralizes a wide range of unpleasant odors, forms a complex with volatile organic molecules, minimizing their potential for producing odors and lowering their intensity in the air. <b>Easy to formulate</b> , completely water soluble without the need of additional solubilizers. Effective in complexing and eliminating airborne and surface malodors such as tobacco, vegetable smells, body odor, animal scents and cooking fat.
-----------------------	-----------------------------------	---

Solvent	Chemical Name	Benefit
<b>Augeo® Clean Multi</b> 	Isopropylidenglycerol	<b>Excellent carrier and/or diluent for fragrances</b> , outstanding solubilization power, sufficient evaporation rate and low odor extending the air fresheners fragrance. A bio-based solvent with low odor and non toxic, low carbon footprint.
<b>Augeo® Crystal (*)</b> 		Sustainable with a natural content of <b>66,7%</b> , as it is obtained from the acetalization of renewable sources (glycerin). (* ) vegan, feedstock soya bean, biobased
<b>Isopropanol</b>	Isopropylalcohol	Dissolves a wide range of non-polar compounds, <b>evaporates quickly</b> , leaves nearly zero oil traces, compared to ethanol, and is relatively non-toxic, compared to alternative solvents.

Surfactant	Chemical Name	Benefit
<b>Alkamuls® CRH 40</b>	PEG-40 Hydrogenated Castor Oil	<b>Effective solubilizer</b> for aqueous and aqueous-alcoholic solutions of fragrances or lipophilic actives, co-emulsifier, stable under neutral, mildly acidic and mildly alkaline conditions.
<b>ERCASORB MSE V/FD</b>	Polysorbate 60	O/W nonionic emulsifier, suitable for creams, liquid emulsions and as <b>solubilizer for essential oils</b> .
<b>HARKE Surf Muls D6</b> 	Sorbitan Oleate Decylglucoside Crosspolymer	PEG-free, nonionic emulsifier made from <b>100% bio-based raw materials</b> . Mostly hydrophilic, dispersible in water, soluble in varying degrees in organic liquids, used for oil-in-water (O/W) emulsification and dispersion of fragrances and all types of oils, compatible with nonionic, cationic and anionic ingredients and effective in systems with relatively high levels of electrolyte, acid or base.
<b>Mackam® OIP-40</b>	Sodium-2-Ethyl-Hexylimnodipropionate	<b>Low foaming</b> , salt free hydrotrope, good caustic stability, coupling agent, soluble in ethanolic and isopropanolic systems as well as water with good wetting contact angle reduction.



Rheology Modifier	Chemical Name	Benefit
<b>Aqua-Sol C610</b> 	Carrageenan	Quality fine powders manufactured from natural strains of red seaweeds specially formulated for use in <b>high clarity air freshener gel applications</b> .
<b>Cellogen</b>	Carboxymethyl Cellulose, Sodium (CMC)	Water soluble, derived from naturally occurring cellulose, specifically purified, <b>viscous biodegradable non-toxic polymer</b> , used in different fields of industry due to its versatile rheological functions.
<b>Jaguar® HP-120</b> 	Hydroxypropyl Guar	Renewable polymer extracted from the guar bean, displays rapid hydration effect in hydro alcoholic solutions without the need for neutralization, will tolerate <b>up to 90% Ethanol or Isopropanol</b> . Inclusion level – circa 1 - 1,5%. RCI 71%.
<b>Jaguar® HSG</b> 	Hydroxypropyl Guar	Compatibility with very high alcohol contents, <b>provides homogeneous clear formulations</b> even at 75% alcohol contents, natural based with an RCI of 71%, with all types of active quats, from pH 4 to pH 9 and with standard emollients. Inclusion level – circa 1 - 1,5%.
<b>Rheomer® 33T</b>	Polyacrylates-33	Easily dispersible liquid HASE-polymer which will give viscosity upon neutralized. A pH above 6,5 will give clarity, will tolerate up to <b>70% ethanol or isopropanol</b> . Inclusion level – circa 4 - 6%.

## Additive

### Fragrances

High quality fragrances based on aromatic ingredients, oil and water-soluble, with outstanding chemical stability and long lasting smell, designed on request.

### Colorants

Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitizing agents, industrial formulations, household products.

**FORMULATION\*: AIR CARE (ask our technical team for more formulations)**

**Reed diffuser**

Ingredients	Market Product	Proposal 1	Proposal 2
<b>Fragrance</b>	10 - 20%	10 - 20%	10 - 20%
DPM/DPMA	80 - 90%	-	-
Ethanol	-	-	5 - 10%
<b>Augeo® Clean Multi</b>	-	80 - 90%	65 - 85%

**Spray**

Ingredients	Market Product	Proposal 1
<b>Fragrance</b>	10 - 20%	10 - 20%
DPM	80 - 90%	-
<b>Augeo® Clean Multi</b>	-	80 - 90%

**Plug-In**

Ingredients	Market Product	Proposal 1
<b>Fragrance</b>	10 - 40%	10 - 40%
DPM	60 - 90%	-
<b>Augeo® Clean Multi</b>	-	60 - 90%

**Air care gel**

Ingredients	Market Product	Proposal 1
<b>Fragrance</b>	2 - 10%	2 - 10%
<b>Alkamuls® CRH 40</b>	6 - 10%	3 - 5%
<b>Aqua-Sol C610</b>	2%	-
<b>Augeo® Clean Multi</b>	-	3 - 5%
H <sub>2</sub> O	up to 100%	up to 100 %

**Air fresh spray**

Ingredients	%	Ingredients	%
<b>HARKE Surf SME</b>	1	<b>Flexisorb™ OD-120ZnR</b>	25
<b>Fragrance</b>	0,50	<b>Fragrance</b>	1
<b>HARKE Surf Muls D6</b>	6	<b>Mackam® OIP-40</b>	5
Presevative	qs	38% EDTA	5
H <sub>2</sub> O	up to 100%	H <sub>2</sub> O	up to 100%

\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.



## AUTOMATIC DISHWASH



Bleaching Agent	Chemical Name	Benefit
<b>Eureco™ RP103</b>	Phthalimido Peroxycaproic Acid	Dry granular mixture based on PAP crystals, delivers outstanding bleaching, disinfecting and deodorizing effect <b>in low temperature</b> washing. It is suitable for formulating powdered detergents, requires a <b>very low dosage</b> (indicative ratio 1:7 vs. Sodium Percarbonate + TAED). This makes it suitable for manufacturing compact detergents as well as small unit doses. Formulated with high technical standards, optimal dissolution rate with a long lasting shelf life.
<b>Oxyper® SCS, SCM</b>	Sodium Percarbonate	<b>Stabilized grade</b> specially designed for use in laundry (powders and tablets) and in bleach additive products.
<b>TAED</b>	Tetraacetylenediamin	Enables cleaning effectively and safely <b>at lower temperatures</b> , thereby reducing energy usage and minimizing environmental impact.

Builder & Chelate	Chemical Name	Benefit
<b>Nabion™ 15</b>	Co-Granular Soda Ash/Silicate	Builder for dry-mixing process or in post addition for powder and tablet formulation, key functions <b>elimination of Ca and Mg</b> , contribution to alkalinity and liquid absorption, dispersing agent to <b>prevent mineral deposits</b> , due to high alkalinity <b>soil removal</b> in automatic dishwashing and laundry detergents.
<b>Nabion™ 26</b>	Co-Granular Soda Ash/Silicate	<b>Sequestering agent</b> (capturing magnesium and calcium) used in the formulation of powders or tablets for washing machines and dishwashers, replacing products that are near end-of-life such as phosphates and zeolite, <b>labelled as non-corrosive</b> , more flexibility in the formulation in respect of consumers safety.

<b>Flexisperse™ 450N</b>	Fully Neutralized Sodium Polyacrylate	Multi-functional ingredient enhances the performance and efficiency of cleaning formulations, sequesters hardness ions allowing for optimum surfactant performance, delivers <b>excellent crystal growth inhibition</b> , anti-encrustation, anti-redeposition of particulate soil, stable builder in high alkaline/bleach I&I cleaners.
<b>ADPA</b>	Sodium Salt of 1-Hydroxyethan-1,1-Diphosphonsäure (HEDP)	Excellent <b>calcium carbonate inhibitor</b> , used as a combination of chelating agent, scale inhibitor, and bleach stabilizer.
<b>Film &amp; Performance Polymer</b>	<b>Chemical Name</b>	<b>Benefit</b>
<b>Mirapol® Surf-S 480 PF NP</b>	Acrylic-Based Polymer	Best-in-class surface <b>hydrophilization</b> polymer designed for ADW applications, outstanding shining and spot-free results on glass and ceramic with a dosage level of 0,5 - 1%. Available as a <b>preservative free</b> or Ecolabel conform version (490-PF) preserved with Phenoxxyethanol.
<b>Mirapol® Surf-S P free power NP</b>	Blend of Acrylic Based Polymer and Sodium Carbonate	Granular powder to be used in automatic dish washing (3in 1 tablets or powder) to deliver the rinse aid function, bring superior performances in phosphate-free formulations, avoid spot & streak-free residues on dishware, rinse-aid multi-benefits for all-in-one detergents, easy process: liquid or granulated polymer <b>easy to introduce</b> , no polymer build-up.
<b>Rheology Modifier</b>	<b>Chemical Name</b>	<b>Benefit</b>
<b>Rheozan® BLC</b> 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	<b>Liquid suspension aid</b> , improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Applications: Laundry detergents, dish wash, cleaners, suspending abrasive particles, capsules or actives RCI <90, 100% natural, alternative to synthetic.
<b>Rhodopol® Extra 2 Clear</b>	Xanthan Gum	Cost-efficient in mild acidic media, highly pseudo plastic, useful for thickening and stabilizing, <b>fast solubilisation</b> and processing in acidic media, suitable for <b>clear</b> formulations.
<b>Surfactant</b>	<b>Chemical Name</b>	<b>Benefit</b>
<b>Antarox® LF 54</b> 	Fatty Alcohol Ethoxylate	Detergent with low foaming properties suitable for technical cleaners and rinse aids, also for industrial use, C12/C14 Alcohol 5EO/4 PO. <b>Cloud point 28 - 31 °C.</b>
<b>Antarox® L64</b>	Poloxamer 184	Specialty poloxamer surfactants to be used in detergent or rinse aid applications, perfect option for low foaming and wetting agents. <b>Cloud point 57 - 61 °C.</b>
<b>Antarox® L62</b>	Polaxamer 182	Versatile nonionic surfactant, used in industrial and homecare application such as automatic dish-wash formulations, hard surface cleaners and general cleansers. <b>Cloud point 30 - 34 °C.</b>
<b>HARKE Surf APG 4</b>	C4 Butyl Polyglucoside (APG)	An alkylpolyglucoside, a non-ionic non ethoxylated surfactant prepared from glucose and alcohol, <b>high wetting power</b> for reinforce the spreading and penetration. Very limited up to no foam production.





**Additive****Fragrances**

High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting smell, designed on request.

**Colorants**

Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitizing agents, industrial formulations, household products.

**FORMULATION\*: AUTOMATIC DISHWASH (ask our technical team for more formulations)****Dishwashing powder**

	Premium	Standard	Innovative
<b>Ingredients</b>	<b>%</b>	<b>%</b>	<b>%</b>
Trisodium Citrate	30	15	20
<b>Sodium Carbonate</b>	13	10	10
<b>Nabion™ 26</b>	30	25	30
<b>Antarox® LF 54</b>	3	3	3
<b>Oxyper® SCS</b>	-	18	10
<b>TAED</b>	-	3	2
<b>Eureco™ RP103</b>	10	-	5
<b>Mirapol® Surf-S P free power NP</b>	2	1	1
<b>ADPA</b>	1	1	1
<b>Flexisperse™ 450N</b>	8	8	8
Protease	1,5	1,5	1,5
Amylase	1,5	1,5	1,5
<b>Sodium Sulfate</b>	-	13	7



**Rinse aid**

<b>Ingredients</b>	<b>%</b>
<b>Antarox® LF 54</b>	7
Sodium Cumene Sulfonate	10
<b>Citric Acid</b>	4
H <sub>2</sub> O	up to 100%
















\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.

## HAND DISHWASH



Additive	Chemical Name	Benefit
<b>Mackadet® OPR 2</b> 	Cocamidopropylbetaine, Glycol Distearate, Sodium Benzoate	<b>Unique natural-based opacifying concentrate</b> , designed as an alternative to polymeric opacifiers, easy to formulate, cold process, no need for heat, concentrate based on renewable resources which degrade naturally in the environment. <b>RCI = 90%</b> , Use level 3 - 4%. No need to add rheological agent if viscosity is > 3000 cps. Provides a rich and creamy appearance. Enhance the intensity of the formulation color!
<b>ERCAPEARL 500</b>	Sodium Laureth Sulfate, Glycol Distearate, Cocamide MEA, Laureth 10	An effective <b>cold pearlizing agent</b> , delivering a high level of pearlizing ester, and foam boosting and stabilisation.
Film & Performance Polymer	Chemical Name	Benefit
<b>Mirapol® Surf-S 600</b>	Acrylic-Based Polymer	Hydrophilising polymer, provides <b>anti-spotting</b> , anti-streaking, anti-filming, preservative free.
<b>Flexipel SR-80</b>	Acrylic-Based Polymer	Invisible, durable oil soil, soap scum and <b>hard water deposit barrier</b> .
Rheology Modifier	Chemical Name	Benefit
<b>Rheozan® BLC</b> 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	<b>Liquid suspension aid</b> , improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Applications: Laundry detergents, dish wash, cleaners, suspending abrasive particles, capsules or actives. RCI < 90, 100% natural, alternative to synthetic. <b>Perfect match to Mackadet OPR 2.</b>



Surfactant	Chemical Name	Benefit
<b>Cepsinol® -es 1216/2S</b> 	Sodium Lauryl Ether Sulfate	High surface activity, <b>high foam</b> ability, good viscosity response, low irritation property and excellent hard-water resistance. Readily biodegradable, used as primary surfactants in cosmetic products. Available in <b>28% and 70%</b> concentration, high pH ⇒ preservative free. Preservation on request if needed.
<b>HARKE Surf Suga Fax</b> 	Sodium Decylglucosides Hydroxypropyl Phosphate	100% biobased, nonpetroleum based, EO/PO Free, readily biodegradable, safe for the environment and humans, mild to eyes and skin, rapid wetting, broad spectrum of pH usage, <b>effective detergent and hydrotrope</b> .
<b>HARKE Surf Nate 100P</b> 	Sodium Hydroxypropylsulfonate Decylglucoside Crosspolymer	High foaming sulfonated surfactant based on a naturally-derived alkyl polyglucoside derivative, offers good emulsification, mildness to the skin, <b>excellent lime soap dispersion</b> to give the formulator maximum flexibility in the preparation of light and heavy duty cleaners. Stable at any pH makes it desirable in many formulations for I&I and home care.
<b>HARKE Surf 100 NC</b> 	Sodium Decylglucosides Hydroxypropylsulfonate	High foaming sulfonated surfactant based on a naturally-derived alkyl polyglucoside derivative, <b>offers good emulsification</b> , mildness to the skin, and excellent lime soap dispersion to give the formulator maximum flexibility in the preparation of light and heavy-duty cleaners, suitable for <b>use in acidic</b> formulations.
<b>Mackam® 50 ULB</b>  	Cocamidopropyl Betaine	<b>High active grade</b> made from a low colour and odour, <b>coconut feedstock</b> , about 25% more concentrated than typical grades of CAPB, no need for a preservative, excellent stability over a broad range, compatible with both anionic & cationic surfactants. RCI 63%.
<b>Mackam® CBS 50G</b> 	Cocamidopropyl Hydroxysultaine	Robust, high foaming surfactant, excellent foam volume and stability across a wide range of pH and in high electrolyte systems. <b>Excellent lime soap dispersion</b> . RCI 63%.
<b>Mackam® LSB-50</b> 	Lauramidopropyl Hydroxysultaine	Similar to Mackam CBS 50G, but improved color stability, extreme mild amphoteric surfactant. <b>Good soil removal</b> . RCI 60%.
<b>Mackamine® 654</b> 	Decylamine Oxide	Low to moderate foaming properties, compatible with most surfactants, no hydrolyze in acid systems, stable in highly alkaline products, <b>useful in high electrolyte containing cleaners and foamers</b> . RCI 83%.
<b>Mackamine® CAO E-36</b>  	Cocamidopropyl Amine Oxide	Non Ionic surfactant providing long lasting foam, high natural based ingredient, <b>viscosity building</b> . RCI 73%.
<b>Mackamine® LA</b>  	Lauramine Oxide	Non Ionic surfactant providing long lasting foam and good detergency, foam volume & stability, <b>grease removal</b> . RCI 86%.
<b>Rhodacal® LSS 92/MRP</b>	Sodium C14 Olefin-Sulfonate	Very high foaming surfactants in <b>powder form</b> used in a wide range of formulations
<b>Rhodapex® ESB-70 NAT</b>  	Sodium Lauryl Ether Sulfate	2EO sodium laureth sulfate that is made from <b>100% renewable carbon</b> . Ethylene oxide is made from sugar cane and fattyalcohol from palm kern oil.

**Additive**

**Fragrances**

High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting odors, designed on request.

**Colorants**

Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitising agents, industrial formulations, household products.

**FORMULATION\*: HAND DISHWASH (ask our technical team for more formulations)**

**Efficient HDW with low active content**

Ingredients	%
H <sub>2</sub> O	up to 100
<b>Rhodapex® ESB-70 NAT</b>	12,2
<b>Mackamine® LA</b>	2,5
<b>Mackam® 50 ULB</b>	1,5
<b>Mackam® LSB 50</b>	2
Preservative	0,05 - 1
<b>Citric Acid</b>	QS pH 7 - 8

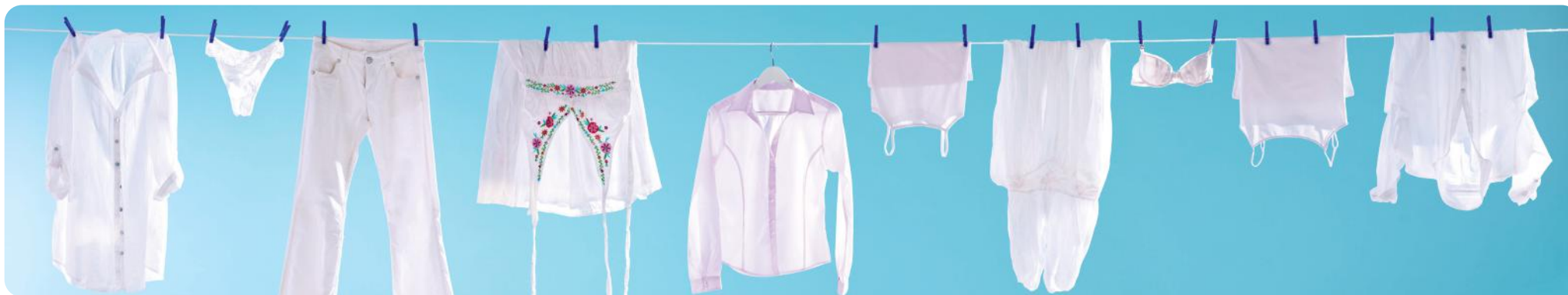
**HDW with long lasting foam & self drying**


Ingredients	%
H <sub>2</sub> O	up to 100
<b>Rhodacal® LSS 92/MRP</b>	1,65
<b>Rhodapex® ESB-70 NAT</b>	19,28
<b>Mackamine® CAO E-36</b>	16,67
<b>Mackam® LSB 50</b>	9,76
<b>Mirapol® Surf-S 600</b>	1
Preservative	0,05 - 1
<b>Citric Acid</b>	QS pH 7 - 8
Sodium Chloride	QS viscosity 800 - 1200 cps

\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.



## FABRIC CARE



Additive	Chemical Name	Benefit
<b>ERCAPEARL 500</b>	Sodium Laureth Sulfate, Glycol Distearate, Cocamide MEA, Laureth 10	An effective cold pearling agent, delivering a high level of pearling ester, and foam boosting and stabilisation.
<b>Mackadet® OPR 2</b> 	Cocamidopropylbetaine, Glycol Distearate, Sodium Benzoate	<b>Unique natural-based opacifying</b> concentrate, designed as an alternative to polymeric opacifiers, easy to formulate, cold process, no need for heat, concentrate based on renewable resources which degrade naturally in the environment. <b>RCI = 90%</b> , Use level 3 - 4%. No need to add rheological agent if viscosity is > 3000 cps. Provides a rich and creamy appearance. Enhance the intensity of the formulation color!
Bleaching Agent	Chemical Name	Benefit
<b>Eureco™ RP103</b>	Phthalimido Peroxycaproic Acid	Dry granular mixture based on PAP crystals. Delivers outstanding bleaching, disinfecting and deodorizing effect <b>in low temperature</b> washing. It is suitable for formulating powdered detergents, requires a <b>very low dosage</b> (indicative ratio 1:7 vs. Sodium Percarbonate + TAED). This makes it suitable for manufacturing compact detergents as well as small unit doses. Formulated with high technical standards, optimal dissolution rate with a long lasting shelf life.
<b>Eureco™ LX5</b>	Phthalimido Peroxycaproic Acid	Liquid aqueous mixture containing PAP crystals in stabilized suspension, which exploits <b>superior bleaching</b> and deodorizing performance along with anti-mould and biocidal activity against a wide spectrum of germs and bacteria. Also available with 17% active content (as PAP).
<b>Oxyper® SCS, SCM</b>	Sodium Percarbonate	<b>Stabilised grades</b> specially designed for use laundry (powders and tablets) and in bleach additive products.
<b>TAED</b>	Tetraacetylenediamin	Enables clothes to be cleaned effectively and safely <b>at lower temperatures</b> , thereby reducing energy usage and minimizing environmental impact.



Builder & Chelate	Chemical Name	Benefit
<b>Nabion™ 15</b>	Co-Granular Soda Ash/Silicate	Builder for dry-mixing process or in post addition for powder and tablet formulation, key functions <b>elimination of Ca and Mg</b> , contribution to alkalinity and liquid absorption, dispersing agent to <b>prevent mineral deposits</b> , due to high alkalinity <b>soil removal</b> in automatic dishwashing and laundry detergents.
<b>Nabion™ 26</b>	Co-Granular Soda Ash/Silicate	<b>Sequestering agent</b> (capturing magnesium and calcium) used in the formulation of powders or tablets for washing machines and dishwashers, replacing products that are near end-of-life such as phosphates and zeolite, <b>labelled as non-corrosive</b> , more flexibility in the formulation in respect of consumers safety.
<b>Flexisperse™ 450N</b>	Fully Neutralized Sodium Polyacrylate	Multi-functional ingredient enhances the performance and efficiency of cleaning formulations, sequesters hardness ions allowing for optimum surfactant performance, delivers <b>excellent crystal growth inhibition</b> , anti-encrustation, anti-redeposition of particulate soil, stable builder in high alkaline/bleach I&I cleaners.
<b>Flexisperse™ 875</b>	Acrylic/Maleic Polymer	Provides a <b>strong sequestration</b> of hardness ions. Highest calcium binding coefficient.
<b>DETPMP</b>	Phosphonat	Excellent calcium carbonate inhibitor, in laundry detergents used as a combination of chelating agent, scale inhibitor, and bleach stabilizer.
<b>Resaquest ECO</b>	Confidential	Optimised blend of chelates, specifically developed to give an <b>ecofriendly</b> alternative to more traditional detergent builders whilst maintaining outstanding performance, no H phrases under CLP, no phosphates or phosphonates, near neutral pH value, out performs Na4EDTA on a one-to-one basis, up to three times more effective than Na3NTA, outperforms other eco options, i.e.: GLDA and Na4IDS.

Film & Performance Polymer	Chemical Name	Benefit
<b>Repel-O-TEX® Crystal</b>	Polyethylene Glycol Polyester	Designed <b>for liquid laundry detergents</b> , imparts soil release properties to polyester fabrics, offering protection against adhesion of greasy soils between wash cycles. <b>Recommended inclusion rate: 1 - 1,5%</b> .
<b>Repel-O-TEX® SRP6</b>	Polyethylen Glycol Polyester	<b>Powdered polymer</b> offering protection against the adhesion of greasy soils to polyester fabrics after two wash cycles, compatible with all powder formulations, powerful boost to soil removal for synthetic and mixed fabrics. <b>Recommended inclusion rate: 0,5 - 1,0%</b> .
<b>Repel-O-TEX® SF2</b>	Polyaromatic Ester	Designed <b>for powder and tablet laundry</b> , imparts soil release properties to polyester fabrics, offering protection against adhesion of greasy soils between wash cycles. <b>Recommended inclusion rate: 0,5 - 1,0%</b> .
<b>Flexisorb™ OD-120ZnR</b>	Zinc Ricinoleate 20% Active	Odor absorber for sports wash, dispersion which readily dilutes in water while (bio-based content) <b>20% actives maintaining clarity</b> . Bio-based content from castor seed oil.





<b>Flexisorb™ OD-500</b>	Zinc Ricinoleate 50% Active	Highly concentrated zinc salt dispersion soluble in alcohol and polar organic solvents, and in aqueous surfactant mixtures. <b>High actives</b> , low moisture complex, requires additional stabilizing ingredients. Use as an odor control agent in a range of applications 50% active.
<b>Rheology Modifier</b>	<b>Chemical Name</b>	<b>Benefit</b>
<b>Rheomer® FC NAT</b> 	Guar Gum	Allows formulations of transparent surface cleaner at low usage level, <b>compatible with hydro alcoholic solutions</b> . RCI 82%.
<b>Rheomer® 33T</b>	Polyacrylate -33	Designed to provide a <b>high thickening efficiency</b> , suspension properties & high clarity in low-medium surfactant content systems.
<b>Rhodopol® Extra 2 Clear</b>	Xanthan Gum	Cost-efficient in mild acidic media, highly pseudo plastic, useful for thickening and stabilizing, <b>fast solubilisation</b> and processing in acidic media.
<b>Rheozan® BLC</b> 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	Liquid suspension aid, improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Applications: Laundry detergents, dish wash, cleaners, suspending abrasive particles, capsules or actives. RCI < 90, 100% natural, alternative to synthetic. <b>Perfect match to Mackadet OPR 2.</b>
<b>Surfactant</b>	<b>Chemical Name</b>	<b>Benefit</b>
<b>Cepsinol® -es 1216/2S</b> 	Sodium Lauryl Ether Sulfate	High surface activity, high foam ability, good viscosity response, low irritation property and excellent hard-water resistance. Readily biodegradable, used as primary surfactants in cosmetic products. Available in <b>28% and 70%</b> concentration, high pH ⇒ preservative free. We can add preservation on request if needed.
<b>Geropon® T 77</b>	Sodium Methyl Oleyl Taurate	Mild anionic surfactant that contributes a dense, creamy lather, excellent dispersant for hard water, used as a secondary surfactant, <b>recommended for laundry hand wash</b> and hand dish liquids.
<b>Mackamine® MY</b> 	Myristamine Oxide	Excellent detergency, grease cutting & solubilizer. <b>High foaming</b> , hypochlorite and peroxide stable. RCI 88%.
<b>Mackamine® LA</b>  	Lauramine Oxide	Non Ionic surfactant providing long lasting foam and good detergency, foam volume & stability, <b>grease removal</b> . RCI 86%.
<b>Rhodasurf® B7</b>	Ethoxylated Fatty Alcohol	Used as a wetting agent and emulsifier, C12/C14 7EO.
<b>Rhodapex® ESB-70 NAT</b>  	Sodium Lauryl Ether Sulfate	2EO sodium laureth sulfate that is made from <b>100% renewable carbon</b> . Ethylene oxide is made from sugar cane and fattyalcohol from palm kern oil.
<b>Rhodasurf® 6 NAT</b> 	Laureth 6	6EO ethoxylated lauryl alcohol that is produced using only vegetable sources and having <b>100% renewable carbon</b> , used in applications such as modern cleaner as excellent emulsifiers with good detergency and wetting properties but with an outstanding sustainable profile.



Bleaching Agent	Chemical Name	Benefit
<b>Eureco™ LX17</b>	Phthalimido Peroxycaproic Acid	Liquid aqueous mixture containing PAP crystals in stabilized suspension, which exploits <b>superior bleaching</b> and deodorizing performance along with anti-mould and biocidal activity against a wide spectrum of germs and bacteria. Extensive bleach and de-staining activity over a wide range of stains like: grass, tea, coffee, tomato etc. Removal of bad smells (sportswear, laundry machines, appliances). Also available with 5% active content (as PAP).

Film & Performance Polymer	Chemical Name	Benefit
<b>Flexipel™ HR-C400</b>	Confidential	Nonfluorinated <b>water repellent treatment</b> for textiles and upholstery such as cotton, polyester, and cotton/polyester blends with heat cure or ambient cure.
<b>Thetapel™ AM 5010</b>	Acrylic Fluoropolymer	Partially fluorinated product designed for aftermarket, ambient cure, soft surface <b>soil and stain protection</b> applications. While it offers protection to a broad range of surfaces, specifically designed to impart soil and stain protection, through optimal water and oil repellency when applied to apparel, upholstery, leather, carpeting and nonwoven fabrics. Exhaust application in laundry wash rinse cycle, followed with normal drying.
<b>Thetapel™ AM 5022</b>	Acrylic Fluoropolymer	Solvent based repellent made with acrylic fluoropolymer, provides a <b>repellent barrier</b> on surfaces such as nylon, cotton, wool, polyester, polyolefin, etc. Also leather and upholstery. Both water and oil repellency benefits are provided. It can be used in solvent-based penetrating sealers and surface treatments. Fast drying. Non-VOC where t-butyl acetate is exempt. Soluble in most polar solvents. Can be spray applied.



Solvent	Chemical Name	Benefit
<b>Augeo® Clean Multi</b> 	Isopropylidenglycerol	Sustainable solvent with low odor, bio based derived from renewable source, <b>excellent solubilization power</b> , application cockpit cleaner.
<b>Augeo® Crystal (*)</b> 		Sustainable with a natural content of <b>66,7%</b> , as it is obtained from the acetalization of renewable sources (glycerin). (* ) vegan, feedstock soya bean, biobased
<b>Isopropanol</b>	Isopropylalcohol	Dissolves a wide range of non-polar compounds, <b>evaporates quickly</b> , leaves nearly zero oil traces, compared to ethanol, and is relatively non-toxic, compared to alternative solvents.
<b>Rhodiasolv® Infinity</b>	Blend of Dibasic Ester Solvent and Proprietary Surfactants	Highly effective water dilutable microemulsion concentrate for all purpose cleaning, degreasing and general I&I Cleaner. <b>Stain remover</b> (D-limonene extender).

Surfactant	Chemical Name	Benefit
<b>Flexistat™ WR-152</b>	Proprietary Cationic Surfactant	Water-based fabric treatment that is effective in <b>reducing wrinkles</b> in most fabrics. This pH neutral, color safe treatment can be sprayed on casual clothes for hang drying to reduce wrinkles, or can be applied during ironing to give clothing a pressed appearance without being stiffened by starch.

Additive		
<b>Fragrances</b>		High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting odors, designed on request.
<b>Colorants</b>		Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitising agents, industrial formulations, household products.

**FORMULATION\*: FABRIC CARE (ask our technical team for more formulations)**

**Liquid laundry with high RCI (87,6%)**

Ingredients	Function	Active %	Process
H <sub>2</sub> O	Solvent	up to 100	<b>Step 1:</b> Set up beaker with impeller. <b>Step 2:</b> Add at least ~90% of the deionised water to the beaker and heat to 50 - 60 °C. <b>Step 3:</b> Add Sodium hydroxide (40% solution in water) and lauric acid for saponification and follow by addition of citric acid (50% solution in water). Check the pH and adjust to 7,5 - 8,0, if required. <b>Step 4:</b> Add propylene glycol. <b>Step 5:</b> Add Repel-O-Tex® Crystal. <b>Step 6:</b> Add Rhodasurf® L6 NAT. <b>Step 7:</b> Add Rhodapex® ESB70 NAT (requires long mixing time to completely solubilisation). <b>Step 8:</b> Add enzymes <b>Step 9:</b> Check pH, readjust to 7,5 - 8,0, if required <b>Step 10:</b> Add the remaining water
<b>Caustic Soda</b>		1,81	
Lauric acid (soap)	Antifoam	3	
<b>Repel-O-Tex® Crystal</b>	Soil release polymer	1	
<b>Rhodasurf® 6 NAT</b>	Non ionic surfactant	10	
<b>Rhodapex® ESB-70 NAT</b>	Anionic surfactant	14	
<b>Citric Acid</b>	Builder, enzyme stabilizer	1,5	
Propylene Glycol	Viscosity stabilizer	4	
Savinase Ultra 16L (Protease)	Enzyme	0,5	
Stainzyme 12L (Amylase)	Enzyme	0,15	
Carezyme Premium 4500L (Cellulase)	Enzyme	0,15	

**Powdered bleach stain booster**

Ingredients	%
<b>Eureco™ RP 103</b>	20
<b>Nabion™ 26</b>	20
<b>Citric Acid</b>	5
<b>Sodium Carbonate</b>	5
<b>Geroxon® T 77</b>	1
<b>Sodium Sulfate</b>	up to 100

**Repellent spray**

Ingredients	%	Method	Note
<b>Thetapel™ AM-5022</b>	10	Blend all the ingredients together until clear and homogenous to complete.	This formulation is based on Thetapel AM-5022 which is a solvent based fluorinated repellent and stain resistor for all surfaces, including fabrics. This formulation should be spray applied in a non-enclosed space and allowed to dry at ambient temperature.
<b>Isopropanol</b>	2,5		
ISOPAR H	up to 100		

\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.








## HARD SURFACE CLEANING







Additive	Chemical Name	Benefit
<b>Flexisorb™ OD-300</b>	Zinc Ricinoleate 30% Active	Highly concentrated zinc salt dispersion readily forms a microemulsion when diluted in water. High actives, readily emulsifiable zinc salt complex, may require additional stabilizing ingredients. Use as a <b>stand alone odor control agent</b> , or as an additive in hard and soft surface cleaning formulations 30% active
Builder & Chelate	Chemical Name	Benefit
<b>Resaquest ECO</b>	Confidential	Optimised blend of chelates. It has been specifically developed to give an <b>ecofriendly</b> alternative to more traditional detergent builders whilst maintaining outstanding performance. Carries no H phrases under CLP, no phosphates or phosphonates, near neutral pH value, out performs Na4ED-TA on a one-to-one basis, up to three times more effective than Na3NTA, outperforms other eco options, i.e. GLDA and Na4IDS.
<b>Bricorr® 288</b>	Phosphonated Oligomer	Delivering outstanding <b>anti-scaling benefits</b> with a very low P content i.e. 12% instead of 30% for standard phosphonates such as HEDP, brings very good stability in chlorine formulations equivalent or superior to PBTC (phosphono butane tricarboxylic acid). It has excellent calcium salt inhibition, outstanding calcium complexing and anti-scaling properties and is more active than PBTC on calcium sequestration. Excellent corrosion inhibitor on steel or aluminium.
Film & Performance Polymer	Chemical Name	Benefit
<b>Flexipel Q-50</b>	Water Based Silane Emulsion	An aqueous, water stable, reactive silane which readily dissolves in water to produce a range of benefits <b>including antistatic, lubricity, water repellency, and scratch resistance</b> . Reduces the coefficient of friction making <b>polishing and wiping easier</b> in hard surface cleaners.














<b>Fleixpel SR-80</b>	Acrylic Based Polymer	Aqueous polymer used to impart a <b>hydrophilic and easy clean surface</b> which resists soap scum build-up, hard water deposits, and oily soil, provides spot-free drying and anti-fogging benefits in hard surface cleaners and treatments, functions in neutral, acid, alkaline, and peroxide environments. Acceptable for aerosol application.
<b>Flexipel SR-95 HF</b>	Acrylic Polymer, Amphoteric Surfactant	This functionalized dispersant polymer has <b>built-in detergent</b> , wetting, and haze-free characteristics for use as an additive in bath & shower cleaners, hard surface cleaners, and vehicle cleaners such as one-step self-dry, no rinse, touchless wash. It enhances cleaning and leaves behind a durable barrier which <b>resists the insults of hard water, soap scum, and particulate soils</b> . Acceptable for aerosol application.
<b>Flexishine CP-100</b>	Water Based Mineraloil Emulsion	Concentrated system used to create a one step cleaner, polish and protector, dries quickly, imparting a self-healing, durable film that repels/masks fingerprints and smudges, for use on <b>stainless steel</b> and other hard, non-porous surfaces, can be used between 10 - 35%.
<b>Mirapol® Surf-N HSC</b>	Natural-Based Powder Cationic Polymer	Inovative, naturally derived and highly active polymer that boosts the performance of ordinary surfactant-based cleaners, more hydrophilic for easier cleaning, reducing drying time. It is particularly suited to <b>modern plastic surfaces</b> , such as PMMA, Melamine, and polycarbonates.
<b>Mirapol® Surf-S 600</b>	Acrylic Based Polymer	Polymer in hard surface cleaners and delivering the following benefits thorough surface modification: water sheeting, spot free, <b>easy cleaning</b> , anti-streak, fast drying, ong lasting , shiny effect.
<b>Mirapol® Surf-S 900</b>	Acrylic Based Polymer	High performance surface protection polymer for use in acidic formulations such as <b>toilet cleaners</b> to provide soil and scale prevention, longer lasting clean effect, easier cleaning, prevents limescale encrustation.

Rheology Modifier	Chemical Name	Benefit
<b>Rheomer® 33T</b>	Polyacrylate -33	Designed to provide a high thickening efficiency, suspension properties & <b>high clarity</b> in low-medium surfactant content systems.
<b>Rheomer® FC NAT</b> 	Guar Gum	Allows formulations of <b>transparent surface cleaner</b> at low usage level, compatible with hydro alcoholic solutions. RCI 82%.
<b>Rheozan®</b> 	Succinoglycan Gum	Stable in strong acidic & alkaline media. <b>Enhanced adhesion</b> to surfaces. RCI 100%.
<b>Rheozan® BLC</b> 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	<b>Liquid suspension aid</b> , improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Applications: Laundry detergents, dish wash, cleaners, suspending abrasive particles, capsules or actives. RCI <90, 100% natural, alternative to synthetic.
<b>Rhodameen® O2V/LD</b>	PEG-2 Oleamine	Vegetal based <b>cationic surfactant</b> , emulsifier – thickener.
<b>Rhodopol® Extra 2 Clear</b>	Xanthan Gum	Cost-efficient in mild acidic media, highly pseudo plastic, useful for thickening and stabilizing, <b>fast solubilisation</b> and processing in acidic media.



Solvent	Chemical Name	Benefit
<b>Augeo® Clean Multi</b> 	Isopropylidenglycerol	Sustainable solvent with low odor, bio based derived from renewable source, <b>excellent solubilization power</b> , application cockpit cleaner.
<b>Augeo® Crystal (*)</b> 		Sustainable with a natural content of <b>66,7%</b> , as it is obtained from the acetalization of renewable sources (glycerin). (* ) vegan, feedstock soya bean, biobased
<b>Isopropanol</b>	Isopropylalcohol	Dissolves a wide range of non-polar compounds, <b>evaporates quickly</b> , leaves nearly zero oil traces, compared to ethanol, and is relatively non-toxic, compared to alternative solvents.

Surfactant	Chemical Name	Benefit
<b>Aerosol® OT-75 E</b>	Sodium Dioctyl Sulfosuccinate	<b>Excellent wetting</b> , rewetting and levelling agent, also good emulsifying and dispersing properties, reducing surface tension and increasing absorbance and penetration, antistatic and softening properties.
<b>Cepsinol® -es 1216/2S</b> 	Sodium Lauryl Ether Sulfate	High surface activity, high foam ability, good viscosity response, low irritation property and excellent hard-water resistance, readily biodegradable, used as primary surfactants in cosmetic products. <b>Available in 28% and 70%</b> concentration, high pH ⇒ preservative free. We can add preservation on request if needed.
<b>Flexiwet™ NF</b>	Phosphonsäure, Perfluor-C6-12-Alkyl-Derivate, Phosphinsäure, Bis (Perfluor-C6-12-Alkyl)-Derivate	Low foam, anionic fluorosurfactant with <b>exceptional wetting properties</b> , an excellent choice for wetting difficult to wet surfaces such as plastics, oily substrates and waxy surfaces. Stable in concentrated acids, bases, and oxidizing solutions. Functions as a <b>defoamer</b> in applications such as floor polishes.
<b>Flexiwet™ WBD</b>	Alkohole, C9-11, Ethoxyliert	Designed for cost efficient standalone use, powerful wetting and detergent properties, <b>rapid dynamic surface tension</b> , penetration of oily and particulate soils use for polished granite, polished marble, travertine.
<b>HARKE Surf Suga Fax</b> 	Sodium Decylglucosides Hydroxypropyl Phosphate	100% biobased, nonpetroleum based, EO/PO Free, readily biodegradable, safe for the environment and humans, mild to eyes and skin, rapid wetting, broad spectrum of pH usage, <b>effective detergent and hydrotrope</b> .

<b>HARKE Surf Nate 100P</b> 	Sodium Hydroxypropylsulfonate Decylglucoside Crosspolymer	High foaming sulfonated surfactant based on a naturally-derived alkyl polyglucoside derivative, offers good emulsification, mildness to the skin, <b>excellent lime soap dispersion</b> to give the formulator maximum flexibility in the preparation of light and heavy duty cleaners. Stable at any pH.
<b>HARKE Surf 100 NC</b> 	Sodium Decylglucosides Hydroxypropylsulfonate	High foaming sulfonated surfactant based on a naturally-derived alkyl polyglucoside derivative, <b>offers good emulsification</b> , mildness to the skin, and excellent lime soap dispersion to give the formulator maximum flexibility in the preparation of light and heavy-duty cleaners, suitable for use in acidic formulations.
<b>Mackam® 50 ULB</b>  	Cocamidopropyl Betaine	<b>High active grade</b> made from a low colour and odour, <b>coconut feedstock</b> , about 25% more concentrated than typical grades of CAPB, no need for a preservative, excellent stability over a broad range, compatible with both anionic & cationic surfactants. RCI 63%.
<b>Mackam® CBS-50G</b> 	Cocamidopropyl Hydroxysultaine	Robust, high foaming surfactant, which gives excellent foam volume and stability across a wide range of pH and in high electrolyte systems. <b>Excellent lime soap dispersion</b> . RCI 63%.
<b>Mackam® OIP-40</b>	Sodium-2-Ethyl-Hexylimnodipropionate	<b>Low foaming, salt free</b> hydrotrope, good caustic stability, coupling agent, soluble in ethanolic and isopropanolic systems as well as water with good wetting contact angle reduction.
<b>Mackamine® 654</b> 	Decylamine Oxide	Pure decylamine oxide that provides detergency with low to moderate foaming properties, compatible with most surfactants, no hydrolyze in acid systems. <b>Stable in highly alkaline products</b> , useful in high electrolyte-containing cleaners and foamers. RCI 83%.
<b>Mackamine® CS</b>  	Cocamine Oxide	Foaming agent, foam booster and foam stabilizer, viscosity modifier, wetting agent and detergent. Good chemical stability and used as <b>a thickener in formulations containing peroxide or hypochlorite</b> . Antistat agent, emulsifier and detergent. Recommended for use in metal cleaning, hard surface cleaners, light duty detergents and textile. RCI 86%.
<b>Mirataine® H2C-HA</b> 	Sodium Laurimino Dipropionate	Excellent detergent, anti-static, lubricant, <b>stabil 30% NaOH or 10% H<sub>2</sub>SO<sub>4</sub></b> . Compatible with Mirapol® SURF-S polymers it leaves no streaks, which makes it especially suitable for glass cleaners. Compatible with EU Ecolabel for All Purpose Cleaners and Cleaners for Sanitary Facilities. RCI 67%.
<b>Rhodasurf® 6 NAT</b> 	Laureth 6	6EO ethoxylated lauryl alcohol that is produced using only vegetable sources and having <b>100% renewable carbon</b> . Used in applications such as modern cleaner as excellent emulsifiers with good detergency and wetting properties but with an outstanding sustainable profile.
<b>Rhodapex® ESB-70 NAT</b>  	Sodium Laureth Sulfate	Ethylene oxide is made from sugar cane and fattyalcohol from palm kern oil. <b>RCI: 100%</b> MB quality available on request.
<b>Rhodoclean® EFC V2</b> 	Propoxylated Ethoxylated Nopol	Excellent cleaning performances, even compared to NPE, extremely low foam behavior, <b>replaces defoamer</b> , decrease your cleaning time: migrates fast to the interfaces, biodegradable (> 60% after 28 days – OECD 301F)





Film & Performance Polymer	Chemical Name	Benefit
<b>Thetaguard™ HS 3030</b>	Substituted Alkyl Phosphate Esters, Ammonium Salts	Anionic, partially <b>fluorinated repellent</b> and protector. Use for hard surfaces, with little change in appearance. Excellent oil and water repellency and hold-out. Water-based with low VOC. Cannot be spray-applied.
<b>Thetapel™ EC 40</b>	Modified Linseed Oil	Water-based <b>stone enhancer and protector</b> , brings out the color in dull or chalky stone surfaces with minimal gloss. The product also seals and protects the stone surface.
<b>Thetapel™ AM 5022</b>	Acrylic Fluoropolymer	Solvent based repellent made with acrylic fluoropolymer, provides a <b>repellent barrier</b> on surfaces such as concrete, grout, saltillo, travertine, limestone, granite, marble, and slate. Both water and oil repellency benefits are provided. It can be used in solvent-based penetrating sealers and surface treatments. Fast drying. Non-VOC where t-butyl acetate is exempt. Soluble in most polar solvents. Can be spray applied.

Surfactant	Chemical Name	Benefit
<b>Link 706</b>	Proprietary Blend including Ethoxylated Alcohol	Readily biodegradable surfactant system that delivers low dynamic surface tension critical to optimum cleaning. Superior penetration and removal of oily/greasy particulate soils – <b>ability to clean areas where agitation is restricted</b> . Dilutes clear, which makes product easy to rinse.
<b>Mirataine® JCHA</b>	Alkylaminopropionate	Low foaming hydrotrope, <b>excellent wetting</b> , provides very clear rinsing and good hard water tolerance, stable over a wide range of pH, can be used in sprayed hard surface cleaners.
<b>Rhodacal® LSS 92/RP</b>	Sodium C14-16 Olefin Sulfonate	<b>Very high foaming surfactant</b> used in a wide range of Formulations, such as foaming toilet formulations, in low active formulations such as liquid hand soap, also recommended when special acidic stability is required, perform especially well in cold water, and in the presence of electrolyte.



<b>Rhodafac® H66</b>	Phosphate Ester of Alkylphenol Ethoxylate	Excellent <b>low foam</b> hydrotrope, it increases the solubility of other organic species and is a solubilizer for nonionic surfactants in alkaline formulations. Suitable for improving stability of concentrated products and reducing viscosity of concentrated products in Cleaning In Place, All purpose Cleaning and Spray cleaning formulations.
<b>Rhodafac® HA70</b>	Polyoxyethylene Phenyl Phosphate Ester Acid Form	Low Foam hydrotrope (cloud point > 100 °C)
<b>Thetawet™ FS-8000/8050</b>	Nonionic Fluorosurfactants	Short-chain fluorochemical technology, <b>exceptional surface tension reduction</b> for wetting low-energy substrates such as plastic, metal and glass, nonionic character allows compatibility with all surfactant types. Low-melting, waxy solid (100% active) nonionic fluorosurfactant for use in aqueous, non-aqueous, and solvent-based formulations. Excellent water solubility makes it an ideal product to use when building <b>"super-concentrated" formulations</b> . Foaming product. For ease of handling a 50% aqueous version (Thetawet FS-8050) also available.
<b>Thetawet™ FS-8020EB/8020DB</b>	Anionic Fluorosurfactants	30% active water soluble, low foaming anionic fluorosurfactants, an excellent choice for wetting difficult to wet surfaces such as plastics, oily substrates, waxy surfaces, <b>enhanced gloss development</b> for smoother, more even films in finishes and polishes. <b>Diluent water/glycol ether diethylen (EB) or ethyl glycol (DB)</b> .
<b>Thetawet™ FS 8100/8150</b>	Nonionic Fluorosurfactants	Short-chain fluorochemical technology, sparingly water-soluble nonionic, effective at low end-use concentration(10 - 100 ppm), offers excellent surface tension reduction. It performs well in severe thermal and chemical environments and is <b>low foaming</b> . Thetawet FS-8150, a 25% aqueous version, has <b>anti-fogging</b> properties, so can be used to impart (or even boost) anti-fog properties of things like glass cleaners.
<b>Thetawet™ FS-8200/8250</b>	Anionic Fluorosurfactants	Solvent-free, anionic fluorosurfactant (un-neutralized, free acid form) for use in non-aqueous (polar organic) solvent or solvent-free (solid) formulations. Low-melting waxy solid (100% active) which <b>can reduce foaming tendency</b> in coatings while providing powerful wetting and leveling. For easy of handling a water dispersible version (Thetawet FS-8250 ) is available. It is a very low foaming product, giving excellent wetting and leveling benefits.

<b>Additive</b>	
<b>Fragrances</b>	High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting odors, designed on request.
<b>Colorants</b>	Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitising agents, industrial formulations, household products.



**FORMULATION\*: HARD SURFACE CLEANING (ask our technical team for more formulations)**

Stainless kitchen cleaner		Shower cleaner	
Ingredients	%	Ingredients	%
Rhodoclean® EFC V2	1	Mirapol® Surf-S 600	1
Mirapol® Surf-N HSC	0,1	Mirapol® Surf-N HSC	0,1
Mirataine® JC-HA	0,9	Mackam® CBS-50G	4
Isopropanol	3	Isopropanol	2
Augeo® Clean Multi	1	Augeo® Clean Multi	1
Citric Acid	QS pH 10	Preservative	0,05
H <sub>2</sub> O	up to 100	Citric Acid	QS pH 2 - 2,5
		H <sub>2</sub> O	up to 100
Modern cleaner		Toilet bowl cleaner	
Ingredients	%	Ingredients	%
Rheomer® FC NAT	0,4	Rhodameen® O2V/LD	7
Mirapol® Surf-N HSC	0,1	Mackamine® LA	3
Rhodasurf® 6 NAT	0,3	Hydrochloric Acid (30%)	10
Mackamine® LA	0,3	Mirapol® Surf-S 900	0,8
Caustic Soda	QS pH 10	Sodium Chloride	5
Preservative	1	H <sub>2</sub> O	up to 100
H <sub>2</sub> O	up to 100		
Stone protector		Wood cleaner	
Ingredients	%	Ingredients	%
Isoporpanol	3	Sodium Citrate	6
Thetaguard™ HS-3030	10 - 15	Flexipel SR -95HF	5
Preservation	Qs	H <sub>2</sub> O	up to 100
H <sub>2</sub> O	up to 100		

Kitchen cleander Cold Mix CC 7		Coloured grout protector 2 spray	
Ingredients	%	Ingredients	%
Chalk	36	<b>Thetaguard™ HS-3040</b>	15
<b>Resaquest ECO</b>	15	<b>Resaquest ECO</b>	5
<b>Rhodacal® LSS 92/RP</b>	7	<b>Isopropanol</b>	5
<b>Rheomer® 33T</b>	5	Preservative	0,1
<b>Rhodasurf® TR 8</b>	2	H <sub>2</sub> O	up to 100
Preservative	0,2		
<b>Fragrance Orange DEV50121</b>	0,2		
H <sub>2</sub> O	up to 100		
Multipurpose cleaner		Caustic low foam degreaser 1	
Ingredients	%	Ingredients	%
<b>Flexiwet™ NF</b>	2	<b>Rhodoclean® EFC V2</b>	10
<b>Alkalizer</b>	1	<b>Resaquest ECO</b>	10
<b>Augeo® Clean Multi</b>	1	<b>Caustic Pearl</b>	10
H <sub>2</sub> O	up to 100%	<b>Mackam® OIP-40</b>	8
		Defoamer	1
		Preservative	0
		H <sub>2</sub> O	up to 100
Floor cleaner		Paint Pro 9	
Ingredients	%	Ingredients	%
<b>Rhodoclean® EFC V2</b>	5	Silicon oil	36
<b>Bricorr® 288</b>	2	<b>Isopropanol</b>	15
<b>Rhodafac® HA701</b>	4	<b>Flexipel Q-50</b>	7
H <sub>2</sub> O	up to 100	<b>Green Apple Fragrance DEV50237</b>	5
		H <sub>2</sub> O	up to 100




\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.






## AUTOMOTIVE CARE










Film & Performance Polymer	Chemical Name	Benefit
<b>Flexipel Q-50</b>	Water Based Silane Emulsion	An aqueous, water stable, reactive silane which readily dissolves in water to produce a range of benefits <b>including antistatic, lubricity, water repellency, and scratch resistance</b> . Reduces the coefficient of friction making <b>polishing and wiping easier</b> in hard surface cleaners, can be used to provide high water bead-up in drying additive for car wash.
<b>Fleixpel SR-80</b>	Acrylic Polymer	Aqueous polymer used to impart a <b>hydrophilic and easy clean surface</b> which resists soap scum build-up, hard water deposits, and oily soil. Provides spot-free drying and anti-fogging benefits in hard surface cleaners and treatments, as well as for vehicle care including DIY applications with rinse. Functions in neutral, acid, alkaline, and peroxide environments. Acceptable for aerosol application.
<b>Flexipel SR-95 HF</b>	Acrylic Polymer, Amphoteric Surfactants	This <b>functionalized dispersant polymer has built-in detergent</b> , wetting, and haze-free characteristics for use as an additive in bath & shower cleaners, hard surface cleaners, and <b>vehicle cleaners</b> such as one-step self-dry, no rinse, touchless wash. It enhances cleaning and leaves behind a durable barrier which resists the insults of hard water, soap scum, and particulate soils. Acceptable for aerosol application.
<b>Mirapol® Surf-S 310</b>	Acrylic Based Polymer	Designed for vehicle cleaning, <b>water sheeting, spot free</b> , anti streak, long lasting effect <b>SELF DRY</b>
<b>Thetapel™ LP-600</b>	Fluoropolymer	<b>Leather protector</b> which is a ready-to-use, aqueous, spreadable gel emulsion. Provides <b>oil &amp; water repellency</b> , plus soil and stain resistance for leather. Easy to use, by wiping on and rubbing off, does not have artificial sheen.

Rheology Modifier	Chemical Name	Benefit
Rheomer® 33T	Polyacrylate -33	Designed to provide a high thickening efficiency, suspension properties & <b>high clarity</b> in low-medium surfactant content systems.
Rheomer® FC NAT 	Guar Gum	Allows formulations of <b>transparent surface cleaner</b> at low usage level, compatible with hydro alcoholic solutions. RCI 82%.
Rheozan® 	Succinoglycan Gum	Stable in strong acidic & alkaline media. <b>Enhanced adhesion</b> to surfaces. <b>RCI 100%</b> .
Rheozan® BLC 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	<b>Liquid suspension aid</b> , improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Applications: Laundry detergents, dish wash, cleaners, suspending abrasive particles, capsules or actives. RCI <90, 100% natural, alternative to synthetic.
Rhodameen® O2V/LD	PEG-2 Oleamine	<b>Vegetal based</b> cationic surfactant, emulsifier – thickener.
Rhodopol® Extra 2 Clear	Xanthan Gum	<b>Cost-efficient</b> in mild acidic media, highly pseudo plastic, useful for thickening and stabilizing, fast solubilization and processing in acidic media.

Solvent	Chemical Name	Benefit
Augeo® Clean Multi 	Isopropylidenglycerol	Sustainable solvent with low odor, bio based derived from renewable source, <b>excellent solubilization power</b> , application cockpit cleaner.
Augeo® Crystal (*) 		Sustainable with a natural content of <b>66,7%</b> , as it is obtained from the acetalization of renewable sources (glycerin). (* ) vegan, feedstock soya bean, biobased
Isopropanol	Isopropylalcohol	Dissolves a wide range of non-polar compounds, <b>evaporates quickly</b> , leaves nearly zero oil traces, compared to ethanol, and is relatively non-toxic, compared to alternative solvents.

Surfactant	Chemical Name	Benefit
Cepsinol® -es 1216/2S 	Sodium Lauryl Ether Sulfate	High surface activity, <b>high foam</b> ability, good viscosity response, low irritation property and excellent hard-water resistance. Readily biodegradable, used as primary surfactants in cosmetic products. Available in <b>28% and 70%</b> concentration, high pH ⇒ preservative free. Preservation on request if needed.
Flexiclean™ LC-200	Nonionic Surfactant	<b>Leather cleaning</b> concentrate which can be diluted with water for cleaning leather substrates, is pH balanced. Acceptable for aerosol application.



<b>Link 706</b>	Proprietary Blend including Ethoxylated Alcohol	Readily biodegradable surfactant system that delivers low dynamic surface tension critical to optimum cleaning. Superior penetration and removal of oily/greasy particulate soils – <b>ability to clean areas where agitation is restricted</b> . Dilutes clear, which makes product easy to rinse.
<b>Link CWW</b>	Blend	High active wash and wax concentrate, with excellent foaming and detergency. It imparts rapid beading/sheeting properties, resulting in reduced drying time/ <b>water spotting and shine</b> . At higher concentrations, thickens upon dilution.
<b>Mackam® 50 ULB</b>  	Cocamidopropyl Betaine	<b>High active grade</b> of cocamidopropyl betaine made from a low colour and odour, <b>cocnut feed-stock</b> . It is about 25% more concentrated than typical grades of CAPB which makes it hostile to microbial growth, eliminating the need for a preservative. Exhibits excellent stability over a broad range and it is compatible with both anionic & cationic surfactants. RCI 63%.
<b>Mackam® CBS-50G</b> 	Cocamidopropyl Hydroxysultaine	Robust, high foaming surfactant, which gives excellent foam volume and stability across a wide range of pH and in <b>high electrolyte systems</b> . Excellent lime soap dispersion. RCI 63%.
<b>Mackam® DP122</b>	Disodium Cocoiminodipropionate	<b>High Foaming</b> , salt free amphoteric surfactants with good detergency and corrosion inhibition. Both give very stable, dense foam.
<b>Mackam® OIP-40</b>	Sodium-2-Ethyl-Hexylimnodipropionate	<b>Low foaming</b> , salt free hydrotrope, good caustic stability, coupling agent, soluble in ethanolic and isopropanolic systems as well as water with good wetting contact angle reduction.
<b>Mackamine® 654</b> 	Decylamine Oxide	Pure decylamine oxide that provides detergency with low to moderate foaming properties, compatible with most surfactants, no hydrolyze in acid systems. <b>Stable in highly alkaline products, useful in high electrolyte-containing</b> cleaners and foamers. RCI 83%.
<b>Mackamine® CS</b>  	Cocamine Oxide	Non Ionic surfactant providing <b>long lasting foam</b> and good detergency, grease removal. RCI 86%.
<b>Rhodasurf® 6 NAT</b> 	Laureth 6	6EO ethoxylated lauryl alcohol that is produced using only vegetable sources and having <b>100% renewable carbon</b> . Used in applications such as modern cleaner as excellent emulsifiers with good detergency and wetting properties but with an outstanding sustainable profile.
<b>Rhodasurf® ESB-70 NAT</b>  	Sodium Laureth Sulfate	<b>Ethylene oxide made from sugar cane</b> and fattyalcohol from palm kern oil. RCI: 100% MB quality available on request.
<b>Rhodoclean® EFC V2</b> 	Propoxylated Ethoxylated Nopol	Great cleaner performances, excellent wetting agent, low foam, suitable for <b>high pressure cleaning</b> .

#### Additive

#### Fragrances

High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting odors, designed on request.

#### Colorants

Concentrated liquid colors for general product tinting of toiletries, cleaning products, sanitising agents, industrial formulations, household products.



**FORMULATION\*: AUTOMOTIVE CARE (ask our technical team for more formulations)**

Shampoo for automatic wash		Truck/bus cleaner		Neutral bike cleaner	
Ingredients	%	Ingredients	%	Ingredients	%
Cepsinol® -es 1216/2S	15	Mackamine® CS	10	Trisodium Citrate	3
Mackam® 50 ULB	5	Mirapol® Surf-S 310	4	Sodium Gluconate	0,5
Mirataine® H2C-HA	3	Mackam® OIP 40	5	Link 706	2
Mirapol® Surf-S 310	5	MGA (78% active)	2	Mackam® DP122	1
MGA (78% active)	5	Fragrance	Qs	MGA (78% active)	2
Citric Acid	Qs	Preservative	Qs	Sodium Bicarbonate	1
Preservative	Qs	H <sub>2</sub> O	up to 100	Fragrance	Qs
H <sub>2</sub> O	up to 100			Preservative	Qs
				Colourants	Qs
				H <sub>2</sub> O	up to 100
Screen wash 9		Durable screen wash 1		Paint Pro 9 MOD 2	
Ingredients	%	Ingredients	%	Ingredients	%
Isopropanol	10	Flexipel Q-50	5	Isopropanol	10
Flexipel Q-50	4	Preservative	0,1	Flexipel Q-50	2
Mackamine® 654	2	H <sub>2</sub> O	up to 100	Silicon oil	3
Preservative	0,1			Preservative	0,1
Colourants	0,05			Green Apple Fragrance DEV50237	0,2
H <sub>2</sub> O	up to 100			H <sub>2</sub> O	up to 100
Mild leather cleaning concentrate		Heavy duty leather cleaning concentrate		Air freshener spray	
Ingredients	%	Ingredients	%	Ingredients	%
Flexiclean™ LC-200	15	Flexiclean™ LC-200	25	Flexisorb™ OD-202	5
H <sub>2</sub> O	85	H <sub>2</sub> O	75	Augeo® Clean Multi	2
				Fresh Line DEV 52494	0,2
				Preservative	Qs
				H <sub>2</sub> O	up to 100



\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.



## CARPET CARE



Additive	Chemical Name	Benefit
<b>Flexisorb™ OD-202</b>	Zinc Ricinoleate 5% Active	Optimized odor control agent for use on carpeting and upholstered surfaces. Containing <b>stain and resoil</b> resistant ingredients.
Builder & Chelate	Chemical Name	Benefit
<b>Resaquest ECO</b>	Confidential	Optimized blend of chelates. It has been specifically developed to give an <b>ecofriendly</b> alternative to more traditional detergent builders whilst maintaining outstanding performance. Carries no H phrases under CLP, no phosphates or phosphonates, near neutral pH value, out performs Na4ED-TA on a one-to-one basis, up to three times more effective than Na3NTA, outperforms other eco options, i.e.: GLDA and Na4IDS.
Film & Performance Polymer	Chemical Name	Benefit
<b>Flexiclean™ CC-560G</b>	Dispersant Polymer	Used in encapsulating carpet and upholstery cleaning formulations, enhances <b>dry soil pick-up</b> during vacuuming.
<b>Flexisperse™ 220</b>	Carpet Care Polymer	Stand-alone acid rinse: reduces yellowing and neutralizes alkalinity, <b>prevents wick-back and browning</b> .
<b>Flexisperse™ 305</b>	Anionic Polymer Detergent	Dries to a brittle crystalline residue, <b>anti-soil redeposition</b> , enhances stain resistance.
<b>Thetapel™ AM 5010</b>	Acrylic Fluoropolymer	<b>Durable repellent</b> & protector for broad range of substrates. Imparts oil & water repellency. Easier cleaning. Apply with trigger spray or low-pressure sprayer. Do not aerosolize.

Surfactant	Chemical Name	Benefit
<b>Flexiwet™ NF</b>	Phosphonsäure, Perfluor-C6-12-Alkyl-Derivate, Phosphinsäure, Bis (Perfluor-C6-12-Alkyl)-Derivate	Low foam, anionic fluorosurfactant with <b>exceptional wetting properties</b> , excellent choice for wetting difficult to wet surfaces such as plastics, oily substrates and waxy surfaces. Stable in concentrated acids, bases, and oxidizing solutions. Functions as a <b>defoamer</b> in applications such as floor polishes.
<b>Flexiwet™ WBD</b>	Alkohole, C9-11, ethoxyliert	Designed for cost efficient stand-alone use, powerful wetting and detergent properties, <b>rapid dynamic surface tension</b> , penetration of oily and particulate soils use for polished granite, polished marble, travertine,
<b>Mackamine® LA</b> 	Lauramine Oxide	Non Ionic surfactant providing long lasting foam and good detergency, foam volume & stability, <b>grease removal</b> . MB on request. RCI 86%.
<b>Mackamine® MY</b> 	Myristamine Oxide	<b>High foam</b> surfactant with excellent viscosity building properties and chemical stability. Particularly useful as an antistatic agent, emulsifier, <b>foam booster</b> and stabilizer, wetting agent. Applications include thickened bleaches, drain cleaners, toilet bowl cleaners and hard surface cleaners. RCI 88%.

Additive	
<b>Fragrances</b>	High quality fragrances based on aromatic ingredients; oil and water-soluble, with outstanding chemical stability and long lasting smell, designed on request.


FORMULATION*: CARPET/UPHOLSTERY CARE (ask our technical team for more formulations)			
Deo Carpet Spotter 1		Upholstery shampoo	
Ingredients	%	Ingredients	%
Flexiclean™ CC-560G	3,5	Resaquest ECO	5
Flexisorb™ OD-202	2	Flexiclean™ CC-560G	4
Resaquest ECO	1,5	Flexisorb™ OD-202	3
Fresh Linen DEV52494	0,2	Flexisperse™ 220	0,2
Preservative	Qs	Fresh Linen DEV52494	0,2
H <sub>2</sub> O	up to 100	Preservative	Qs
		H <sub>2</sub> O	up to 100




\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.









## HYGIENE



Biocide	Chemical Name	Benefit
<b>Actizone® F5 conc.</b>	Concentrate (6X) for Long Lasting Antimicrobial Cleaner with Quat	Aqueous disinfectant/sanitizer formulation, <b>24h residual activity</b> , highly effective against a range of microorganisms (resistant bacteria to viruses), mixture of two registered quaternary ammonium chloride ("Quat") active ingredients coupled with inert, proprietary polymer technology, provides surface antimicrobial protection against repeated microbial contamination and touches over a 24h period (until reapplication), compatible with multiple surface materials. Biocidal active ingredients for <b>PT 2 + 4</b> under EU Biocidal Products Directive
<b>Chlorhexidine Digluconat 20% Solution</b>	1,1-Hexamethylenbis[5-(p-Chlor-Phenyl)Biguanide]di-D-Gluconate	Biocidal active ingredients for <b>PT 1,2,3</b> under EU Biocidal Products Directive, positively charged -> reacts with the negatively charged microbial cell surface, thereby destroying the integrity of cell membranes, penetrates into the cell and causes leakage of intracellular components leading to cell death.
<b>Eureco™ RP103, LX17, LX5</b>	Phthalimido Peroxycaproic Acid	Delivers outstanding bleaching, disinfecting and deodorizing effect in low temperature fabric washing, notified and registered in the list of active ingredients of the 'Biocide Products Regulation' with relevance to the following product types: <b>PT 1 + 2</b>
<b>UniBlue® UDF2</b> 	Blend of Lactic Acid, Tartaric Acid, Peppermint Oil, Lavender Oil	Hard Surface Disinfection fluid to clean and disinfect in 2 steps: 1. cleaning, 2. disinfecting, <b>not classified</b> , yet highly effective, <b>Simplified Authorisation (EU) PT 1,2,3</b> for all kind of non-porous hard surfaces, effective against bacteria (gram-positive and gram-negative), viruses (enveloped and non-enveloped), mycobacteria, yeast.

Rheology Modifier	Chemical Name	Benefit
<b>Jaguar® HP-120</b> 	Hydroxypropyl Guar	Renewable polymer extracted from the guar bean, displays rapid hydration effect in hydro alcoholic solutions without the need for neutralization, will tolerate <b>up to 90% Ethanol or Isopropanol</b> , provides homogeneous translucent formulations. Inclusion level – circa 1 - 1,5%. RCI 71%.
<b>Jaguar® HSG</b> 	Hydroxypropyl Guar	Compatibility with very high alcohol contents, <b>provides homogeneous clear formulations</b> even at 75% alcohol contents, natural based with an <b>RCI of 71%</b> . With all types of active quats, from pH 4 to pH 9 and with standard emollients. Inclusion level – circa 1 - 1,5%.
<b>Rheomer® 33T</b>	Polyacrylates-33	Easily dispersible liquid HASE-polymer which will give viscosity upon neutralized, pH above 6,5 will give clarity, will tolerate up to <b>70% ethanol or isopropanol</b> . Inclusion level: circa 4 - 6%.
<b>Rheozan® BLC</b> 	Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate	<b>Liquid suspension aid</b> , improves compatibility, easily soluble, stable across a wide range of pH, doesn't impact perceived viscosity. Suspending abrasive particles, capsules or actives. RCI < 90, 100% natural, alternative to synthetic.

Solvent	Chemical Name	Benefit
<b>Augeo® Clean Multi</b> 	Isopropylidenglycerol	Sustainable solvent with low odor, bio based derived from renewable source, <b>excellent solubilization power</b> , application cockpit cleaner.
<b>Augeo® Crystal (*)</b> 		Sustainable with a natural content of <b>66,7%</b> , as it is obtained from the acetalization of renewable sources (glycerin). (* ) vegan, feedstock soya bean, biobased
<b>Isopropanol</b>	Isopropylalcohol	Dissolves a wide range of non-polar compounds, <b>evaporates quickly</b> , leaves nearly zero oil traces, compared to ethanol, and is relatively non-toxic, compared to alternative solvents.

Surfactant	Chemical Name	Benefit
<b>Mackadet® 40-K</b>  	Potassium Cocoate	High foaming naturally derived surfactant, ideal for <b>liquid hand soaps</b> . Also good lubricant for e.g. conveyor systems.
<b>Mackol® CAS-100/N</b>  	Sodium Coco Sulfate	Derived from coconut oil, alternative to SLS. Easily dispersed in water, excellent lathering and thickening of formulations. Some <b>conditioning properties</b> . <b>RCI 100%</b> .





**FORMULATION\*: HYGIENE (ask our technical team for more formulations)****Hand sanitizer formulation I**

Ingredients	%	Process
Jaguar® HSG	1,2	<b>Step 1:</b> Disperse Jaguar® into deionized water under stirring until fully disperse (phase A) <b>Step 2:</b> Weight 20 part ethanol and add around 8 drops citric acid (50% water solution) into it. Then add the solution into Phase A under stirring until homogeneous. A transparent gel will be obtain at this step. <b>Step 3:</b> Slowly add rest 55 part ethanol to the gel obtained in step 2, and keep stirring until sample is homogenous. <b>Step 4:</b> Add citric acid solution to reach pH target. <b>Step 5:</b> Check the final pH and viscosity, at 21 °C (Brookfield RV- p 4-10rpm) 5,000-6000cP.
Isopropanol	75	
Citric Acid	QS to pH 4	
H <sub>2</sub> O	up to 100	

**Hand sanitizer formulation II**

Ingredients	%	Process
Rheomer® 33T	11	<b>Step 1:</b> Mix the Ethanol with water. <b>Step 2:</b> While stirring, add Rheomer. <b>Step 3:</b> While stirring, add the neutralizer such as NaOH or triethanolamine. <b>Step 4:</b> Check the final pH (around 7) and viscosity, at 21 °C (Brookfield RV- p 4-10rpm) 5,000-6000cP
Isopropanol	62	
Caustic Soda	1,5	
Glycerin	3	
H <sub>2</sub> O	up to 100	

**Hygiene Bar soap**

Ingredients	%	Process
Mackadet® 40-K	4,5	<b>Step 1:</b> Mix all ingredients together. Heat to 85 °C with slow agitation until everything is dissolved. <b>Step 2:</b> Stop agitation, let bubbles rise. Pour into molds, cool and remove.
Mackol® CAS-100/N	10	
Decyl Glucoside	20	
Glycerin	27	
Stearic Acid, 95%	18	
Caustic Soda	4,5	
1,3-Propanediol	16	

\*Note: The information and recommendations given are, to the best of our knowledge, information and belief, accurate at the date of publication. HARKE Chemicals GmbH assumes no obligation or liability for results obtained or for injuries and damages resulting from the use of its products. It is the responsibility of the user to determine the effectiveness, compatibility, safety and stability of their products and also to ascertain that these preparations do not infringe patents or other industrial property rights held by third parties.



# Our Commitment To Sustainability

We take responsibility for our actions as part of our promise to care for both people and the environment. Our sustainability targets focus on crucial issues such as safety, health and environmental protection, resource efficiency and legal compliance. We are proud on the passion of our employees for the topic of sustainability and provide full management support. As a consequence, a dedicated sustainability task force was put in place with the goal to define yearly targets incl. corresponding assessment tool, to build a comprehensive report and to transfer it into the daily HARKE business processes, company culture and inter-faces with our partners. Let's further grow sustainability together!

## Compliance

Legal compliance is a foundation for our activities. In order to meet the requirements of relevant legislation, we have established a long-standing team of experts in various fields (e.g. REACh, GHS/CLP, Dangerous Good Transport, regulations related to Biocidal, Detergent, Cosmetic, Pharmaceutical and Food products). Through intensive training of our employees, we ensure careful, safe and responsible handling of our products to protect people and the environment. We support both our customers and suppliers in implementing these regulations to ensure safe and compliant handling of our products along the entire supply chain.

## Quality

The continuous improvement of the quality of our products, services and processes is an essential part of our corporate policy. We aim to not only meet but also exceed the expectations of our partners. We have implemented and certified quality management systems in all relevant areas:



**DIN EN ISO 9001**  
Basic of our quality management



**DE-ÖKO-039**  
**(EU/non-EU Agriculture)**  
Raw materials from organic farming



**Responsible Care**  
Responsible handling of chemicals beyond legal requirements



**IFS-HPC2-Certification**  
High quality requirements in production mean safe products for the consumer



HARKE Chemicals GmbH

## Responsibility

We take responsibility for our actions as part of our promise to care for both people and the environment. For more than 20 years we have been actively participating in the Responsible Care Initiative supported by VCH, FECC and ICTA in the areas of product responsibility, plant safety, occupational health and safety, environmental protection, transport safety and dialogue with the public. Furthermore we are committed to the FECC Ethical and Business Principals.

# Products by Categories A - Z

ADDITIVES	
Flexisorb™ OD-120ZnR	8, 11, 19
Flexisorb™ OD-202	8, 35, 36, 37
Flexisorb™ OD-300	8, 24
Flexisorb™ OD-500	8, 20
Flexisorb™ OD-P	8
Mackadet® OPR 2	15, 18
ERCAPEARL 500	15, 18
BASIC CHEMICALS	
Caustic Pearl	31
Caustic Soda	23, 30, 40
Citric Acid	14, 17, 23, 30, 35, 40
Glycerin	40
Sodium Bicarbonate	35
Sodium Carbonate	14, 23
Sodium Sulfate	14, 23
BIOCIDES	
Actizone® F5 conc.	38
Chlorhexidine Digluconat 20% Solution	38
Eureco™ LX5 or LX17	38
Eureco™ RP103	38
UniBlue® UDF2	38
BLEACHING AGENTS	
Eureco™ LX5	18
Eureco™ LX17	21
Eureco™ RP103	12, 14, 18, 23
Oxyper® SCS, SCM	12, 14, 18
TAED	12, 14, 18

BUILDERS & CHELATES	
ADPA	13, 14
Bricorr 288	24, 31
DETPMP	19
Flexisperse™ 450N	13, 14, 19
Flexisperse™ 875	19
Nabion™ 15	12, 19
Nabion™ 26	12, 14, 19, 23
Resaquest ECO	19, 24, 30, 31, 36, 37
FILM & PERFORMANCE POLYMERS	
Flexiclean™ CC-560G	36, 37
Flexipel™ HR-C400	21
Flexipel Q-50	24, 31, 32, 35
Flexipel SR-80	15, 25, 32
Flexipel SR-95 HF	25, 32
Flexishine CP-100	25
Flexisperse™ 220	36, 37
Flexisperse™ 305	36
Mirapol® Surf-N HSC	25, 30
Mirapol® Surf-S 310	32, 35
Mirapol® Surf-S 480 PF NP	13
Mirapol® Surf-S 600	15, 17, 25, 30
Mirapol® Surf-S 900	25, 30
Mirapol® Surf-S P free power NP	13
Repel-O-TEX® Crystal	19, 23
Repel-O-TEX® SF2	19
Repel-O-TEX® SRP6	19
Thetaguard™ HS 3030	28, 30
Thetapel™ AM 5010	21, 36
Thetapel™ AM 5022	21, 23, 28
Thetapel™ EC 40	28
Thetapel™ LP-600	32

RHEOLOGY MODIFIERS	
Aqua-Sol C610	10, 11
Cellogen	10
Jaguar® HP 120	10, 39
Jaguar® HSG	10, 39, 40
Rheomer® 33 T	10, 20, 25, 31, 33, 39, 40
Rheomer® FC NAT	20, 25, 30, 33
Rheozan®	25, 33
Rheozan® BLC	13, 15, 20, 25, 33, 39
Rhodameen® O2V/LD	25, 30, 33
Rhodopol® Extra 2 Clear	13, 20, 25, 33
SOLVENTS	
Augeo® Clean Multi	9, 11, 22, 26, 30, 31, 33, 35, 39
Augeo® Crystal	9, 22, 26, 33, 39
Isopropanol	9, 22, 23, 26, 30, 31, 33, 35, 39, 40
Rhodiasolv® Infinity	22
SURFACTANTS	
Amphoterics	
Mackam® 50 ULB	16, 17, 27, 34, 35
Mackam® CBS-50G	27, 30, 34
Mackam® DP122	34, 35
Mackam® LSB-50	16
Mackam® OIP 40	9, 11, 27, 30, 31, 34, 35
Mirataine® H2C-HA	27, 35
Mirataine® JC-HA	28, 30
Anionics	
Aerosol® OT-75 E	26
Cepsinol® -es 1216/25	16, 20, 26, 33, 35
Geropon® T 77	20, 23
HARKE Surf 100 NC	16, 27
HARKE Surf Nate 100P	16, 27
HARKE Surf Suga Fax	16, 26
Mackadet® 40-K	39, 40

Macksol CAS-100	39, 40
Rhodafac® H66	29
Rhodafac® HA70	29
Rhodacal® LSS 92/MRP	16, 17
Rhodacal® LSS 92/RP	28, 31
Rhodapex® ESB-70 NAT	16, 17, 20, 23, 27, 34
Cationics	
Flexistat™ WR-152	22
HARKE Surf SME	8, 11
Fluoros	
Flexiwet™ NF	26, 30, 31, 37
Thetawet™ FS-8000/8050	29
Thetawet™ FS 8100/8150	29
Thetawet™ FS-8020EB/8020DB	29
Thetawet™ FS-8200/8250	29
Nonionics	
Antarox® L62	13
Antarox® L64	13
Antarox® LF 54	13, 14
Alkamuls® CRH 40	9, 11
ERCASORB MSE V/FD	9
Flexiclean™ LC-200	33, 35
Flexiwet™ WBD	26, 37
HARKE Surf APG 4	13
HARKE Surf Muls D6	9, 11
Link 706	28, 34, 35
Link CWW	34
Mackamine® 654	16, 27, 34, 35
Mackamine® CAO E-36	16, 17
Mackamine® CS	27, 34, 35
Mackamine® LA	16, 17, 20, 30, 37
Mackamine® MY	20, 37
Rhodoclean® EFC V2	27, 30, 31, 34
Rhodasurf® B7	20
Rhodasurf® 6 NAT	20, 23, 27, 30, 34



## Our Partners & Products

Our raw materials enable your detergents and disinfectants to fight dirt, scale and bacteria effectively and make cleaning for your customers in household easy. We have a large product portfolio of certified raw materials and additives. Our products are used in the production of many different detergents and disinfectants: Starting from washing powders, dish washing liquids and multi purpose cleaners up to the production of special detergents. Whether shining bright, streak free gleaming or absolutely clean – we deliver high quality products for clean results. Our raw materials provide that your clean care product will not give scale, soil and bacteria any chance, making cleaning a lot easier for the users household.

Our experience combining the expectations of our Principals with the needs of our customers means that we have a focused list of products, from hand-picked principals, ideally suited to the possible applications of our customers. This helps us to offer the outstanding and well-known HARKE service level!

 <p><b>Chemlink Specialities</b> HARKE GROUP Specialities</p>	 <p><b>ErcaWilmar</b> Cosmetic Ingredients Emulsification/Pearlizing</p>	 <p><b>HARKE Chemicals</b> Home &amp; PersonalCare</p>
<p>Dynamic company offering an application and formulation led approach to chemical distribution.</p>	<p>Reach selection of emollients, emulsifiers, solubilizing agents, giving factors, humectants, emulsion stabilizers and foam boosters.</p>	<p>Our own brand to offer solutions for formulation challenges.</p>
<ul style="list-style-type: none"> <li>• <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• ERCASORB</li> <li>• ERCAPEARL</li> </ul>	<ul style="list-style-type: none"> <li>• HARKE Surf</li> </ul>
 <p><b>Humens</b> Builder</p>	 <p><b>ict</b> innovative chemical technologies, inc. Odor Absorbs, Carpet Care</p>	 <p><b>Kandelium</b> Percarbonate</p>
<p>With more than 50 years of experience with alkali silicates and co-granulation processes, company, focusing on the detergent industry.</p>	<p>Expert in surface modification technologies. Active in different market segments as household, hard surfaces, carpets and many more.</p>	<p>Supplying the chemical industry with a wide range of Percarbonat solutions.</p>
<ul style="list-style-type: none"> <li>• Nabion™</li> </ul>	<ul style="list-style-type: none"> <li>• Flexipel</li> <li>• Thetaguard™</li> <li>• Flexisorb™</li> <li>• Flexiclean</li> <li>• Flexisperse™</li> <li>• Thetawet™</li> </ul>	<ul style="list-style-type: none"> <li>• Oxyper®</li> </ul>





**Chlorhexidine**

One of the world's most respected independent active pharmaceutical Ingredients (APIs) suppliers headquartered in Barcelona, Spain.

- Chlorhexidine digluconate 20 %



**Rheologymodifier**

Focus on biopolymers with unique thickening properties offering considerable formulation flexibility and facilitating finished-product ease in use for the consumer.

- Rhodopol®



**Fragrances Ecolabel Compliant**

Creator and manufacturer of high quality fragrances and aromatic ingredients.

- Fragrances



**Surfactants**

Product portfolio consist of oleochemicals fully driven from vegetable raw materials such as palm kernel oil (PKO) and otherpalm oil fractions.

- CepSinol®



**Coatis – Solvent**

Leader in the production of solvents, phenol and derivatives in Latin America and one of the global leaders in oxygenated solvents.

- Augeo®



**Novecare – Surface modifier**

World number one producer of specialty surfactants. A major player in polymers, amines, guar, and phosphorus derivatives.

- Mirapol® Surf-S
- Repel-O-Tex®
- Rheozan®
- Rheomer®
- Jaguar® HP



**Peroxides – PAP**

Supplying the chemical industry with a wide range of Peroxide solutions.

- Eureco™
- Ixper®



**Biocide**

WipingSystems ApS develops and produces new biocidal product complying with ECHA Simplified Authorization.

- UniBlue®



**Surfactants**

Leading provider of surfactants and specialty chemicals for the personal care, home and hygiene, and industrial markets.

- Mackam®
- Mackamine®
- Mirataine®



## Why HARKE

one group of **16** companies | **17** offices worldwide | **7** divisions | **25** business units  
**15** diverse service functions | **4** laboratories | **2** production sites | over **220** employees  
working with **35** industries | in more than **63** countries | on **4** continents  
with over **3,000** customers | and more than **40,000** deliveries per year

**countless opportunities for a success**



## 10 reasons to collaborate with HARKE

relevant portfolio | long-standing business relationships | growing company group  
excellent technical know-how | responsible partner | fast action | sustainable enterprise  
digitization | stable management | passionate people

**ful and future-oriented collaboration**







# HARKE

HomeCare  
I&I  
AutomotiveCare

**HARKE Chemicals GmbH**  
Business Unit HomeCare, I&I, AutomotiveCare  
Xantener Straße 1  
45479 Mülheim an der Ruhr  
Germany

 +49 (0)208 3069-0  
 [homecare@harke.com](mailto:homecare@harke.com)  
 [www.harke.com/chemicals](http://www.harke.com/chemicals)

 |  |  | HARKE GROUP



ONE PARTNER.  
ONE RESPONSIBILITY.