



HARKE
GROUP



Agrochemicals

HARKE GROUP Chemistry Division

**ONE PARTNER.
ONE RESPONSIBILITY.**



Agrochemicals



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 Agrochemicals

is a business unit of HARKE Group active in crop yields with formulations applied to plant protection products, fertilizers, seeds and soils.

HARKE Agrochemicals stands for several years of experience in the distribution of raw materials for Agricultural industry. We offer innovative products from international principals and assist you concerning the formulation of new products. Our portfolio contains a complete range of additives for crop protection industry to meet your specific needs in terms of performance, cost-effectiveness, safety and environmental protection.



Thorsten Harke | President HARKE GROUP

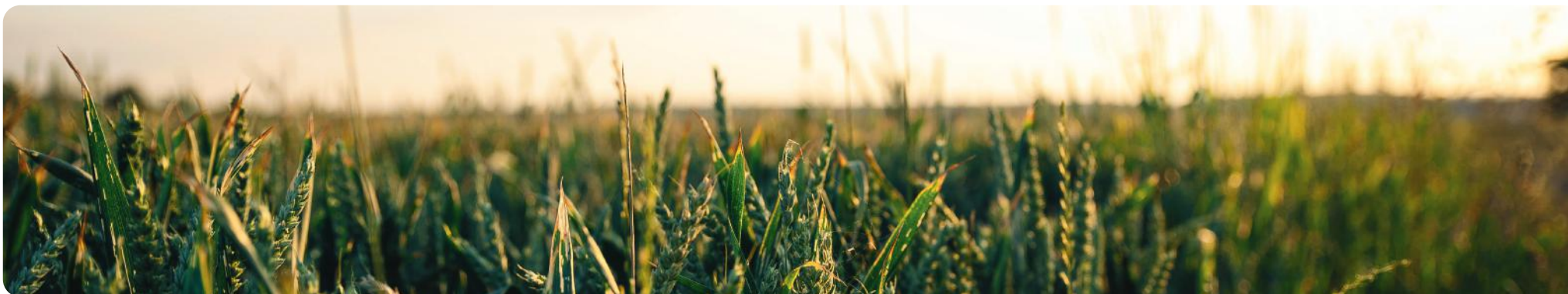


Jens Prinssen | Board Member Chemistry
Managing Director HARKE Chemicals GmbH

HARKE GROUP Chemistry Division

- HARKE Agrochemicals
- HARKE AquaCare
- HARKE BaseChem
- HARKE PureChem

Products Agrochemical Blends



SUSPENSION CONCENTRATES (SC)

A SC is a liquid agrochemical formulation containing finely ground solid particles of active ingredient(s) suspended in water. Solid particles are finely ground for a good physical stability and agronomical efficacy. Upon dilution a SC forms a homogeneous and stable dispersion. It is also called flowable concentrate.

- Aqueous based
- No flash point
- Low skin penetration
- Possibility to reach higher A.I. Concentrations
- No dust
- No problem of toxicity or flammability due to solvents
- Good efficiency due to the smaller size
- Low packaging volume

Products	a.I. (%)	Composition	Form @20 °C	Function
Tensiofix® 96 DB 08	99	Block copolymer	Soft wax	Wetting/Dispersing
Tensiofix® SC	90	Organic sulfonate	Powder	Dispersig
Tensiofix® CGA 213	99	Phosphate esters	Viscous liquid	Wetting/Dispersing
Tensiofix® XA 265	95	Phosphat esters	Hazy liquid	Wetting/Dispersing
Tensiofix® 821	87	Natural gums	Powder	Rheological agent
Tensiofix® LO 51	99	Non silicone defoamer	Hazy liquid	Antifoam

EMULSIFIABLE CONCENTRATES (EC)

EC is a liquid, homogeneous formulation to be applied as an emulsion after dilution in water. Emulsifiable Concentrates (EC), despite the evolution of the other up-to-date formulations, are still used worldwide due to their simple manufacturing process and low costs.

- Very simple technology
- Often better biological activity
- Low costs of production

Products	a.i. (%)	Composition	Form @20 °C	Function
Tensiofix® B 9718	75	Blend of linear CaDDBS & block copolymer	Liquid	Emulsifier
Tensiofix® B 9732	75	Blend of linear CaDDBS & block copolymer	Soft wax	Emulsifier
Tensiofix® N 9811	75	Blend of linear CaDDBS & block copolymer	Liquid	Emulsifier
Tensiofix® N 9824	75	Blend of linear CaDDBS & block copolymer	Liquid	Emulsifier
Tensiofix® N 9839	75	Blend of linear CaDDBS & block copolymer	Soft wax	Emulsifier

SOLUBLE LIQUIDS (SL)

Soluble Concentrate is a clear to opalescent liquid, which can be applied as a solution of the active ingredient after dilution in water. The liquid may contain water-insoluble formulates. It is also known as soluble liquid.

- Easy to make and use
- Cost-effective
- Infinitely dilutable, no flash point
- Physically stable below saturation concentration

Products	a.i. (%)	Composition	Form @20 °C	Function
Tensiofix® D 33	95	Block copolymer	Liquid	Spreader-sticker agent
Tensiofix® D 33 WF	95	Organic sulfonate	Liquid	Spreader-sticker agent
Tensiofix® DP 400	55	Ethersulfate	Liquid	Spreader-sticker agent

TANK MIX ADJUVANTS

Tank mix adjuvants are solutions or blends added to spray tanks to optimize the application of herbicides, fungicides, and insecticides. When added to a phytosanitary syrup, adjuvants improve the effectiveness of the active ingredient, increasing the adhesion to the leaf for example, or better operability during preparation and spraying, enhancing the solubility of the active.

Products	Composition	HLB	Form @25 °C	Function
Surfom® ADJ 8099	Emulsifier for crude soybean oil, APE free	5,8	Liquid	Emulsifier
Surfom® ADJ 8872	Adjuvant for crop oil or high surfactant oil concentrate, APE-free		Liquid	
Surfom® CE 1180	Emulsifier for mineral oil based formulations		Liquid	
Surfom® DRT Series	Drift control adjuvant, NPE-free		Liquid	

Products Agrochemical Surfactants



Surfactants Anionic

Alkyl Benzene Sulfonates	Composition	Form @25 °C	HLB	Functions
SURFOM® 1287 CE	Dodecyl benzene sulphonate calcium salt, in Isobutanol	Liquid	8,6	Emulsifier EC, EW, ME
Tensiofix® KL 70	Dodecyl benzene sulphonate calcium salt, in n-Butanol	Viscous liquid	-	Emulsifier
Tensiofix® KLH	Dodecyl benzene sulphonate calcium salt, in 2-Ethyl-hexanol	Viscous liquid	-	Emulsifier
Tensiofix® IW 60	Dodecyl benzene sulphonate calcium salt, in DPM	Viscous liquid	-	Emulsifier, Dispersing agent

Sarcosinate Derivates	Composition	Form @25°C	Functions
Oramix™ L30	Sodium lauroyl sarcosinate	Liquid	Anionic surfactant derived from sarcosine amino acid (n-methyl glycine) and a natural fatty acid that is sulfate free with a high foaming power, easily biodegradable and paraben free.

EC: Emulsifiable Concentrate

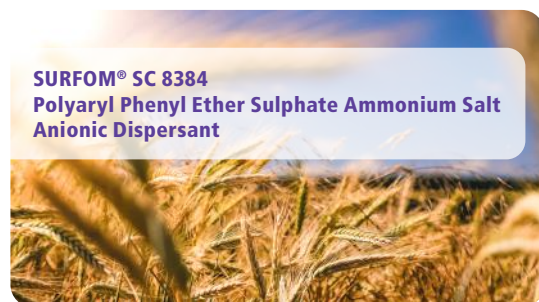
EW: Emulsion Oil in Water

ME: Micro-Emulsion

OD: Oil Dispersion

SC: Suspension Concentrate

TSP Phosphate/Sulphate Esters	Composition	Form @25°C	Functions
SURFOM® 1322 SC	Tristyrylphenol EO 16 phosphate ester, TEA salt	Liquid	Dispersant SC, SE
SURFOM® 1323 SC	Tristyrylphenol EO 16 phosphate ester, Acid form	Liquid	Emulsifier, Dispersant EC, EW, SC, ME, SE
SURFOM® 1325 SC	Tristyrylphenol EO 16 phosphate ester, Potassium salt	Liquid	Dispersant SC, SE
SURFOM® SC 8384	Tristyrylphenol EO 16 sulphate ester, Ammonium salt	Liquid	Emulsifier, Dispersant EC, EW, SC, ME, SE



SURFOM® SC 8384
Polyaryl Phenyl Ether Sulphate Ammonium Salt
Anionic Dispersant

- Versatile ammonium salt which combines good dispersing properties with compatibility with wetting agents
- Approx. 100% concentrate
- Great performance mostly in SC and EC
- Soluble in aromatic solvents
- Soluble in water

Appearance, 25 °C	Viscous liquid
Acid number, mg KOH	Approx. 50
Moisture, wt%	Approx. 1
pH, 5% in water, 25 °C	About 5
Pour Point, °C	Approx. 15
Flash point, CC, °C	Approx. 100
Density, g/cm ³ , 25 °C	1,15
Solubility in water, 25 °C	Soluble
Viscosity, cP, 25 °C	About 12000

Surfactants Nonionic

Alkylpolyglucosids	Composition	Form @25 °C	HLB	Functions
SIMULSOL™SL4	Butyl glucoside	Liquid	16,3	Non ionic surfactant, no cloud point, readily biodegradable, suitable for highly alkaline or electrolytic media, reduces the viscosity of surfactants formulations with no alteration of performances, very limited up to no foam production, contributes to surface tension reduction, easy to handle: liquid form, no flash point, compatible with non-ionic, anionic and cationic surfactants
SIMULSOL™SL 7 G	Heptyl glucoside 100% Biosourced	Liquid	14,2	Hydrotrope & solubiliser ecosurfactant, low foam properties, suitable for alkaline, acidic, oxidative or electrolytic media, no cloud point, readily biodegradable, better hydrolysis resistance vs other green hydrotropes
SIMULSOL™ SL 8	Octyl & Decyl glucoside	Liquid	13,8	No cloud point, readily biodegradable, suitable for highly alkaline or electrolytic media, stable at all pH, easy to combine with all kind of surfactants even anionic & cationic, excellent solubilizing agent for perfumes, essential oils and surfactants
SIMULSOL™ B 865	Octyl & Decyl glucoside	Liquid	13,8	Non ionic surfactant, no cloud point, readily biodegradable, suitable for highly alkaline or electrolytic media, stable at all pH range, easy to combine with all types of surfactants even anionic & cationic, excellent solubilizing agent for perfumes, essential oils and surfactants
SIMULSOL™SL 10	Decyl glucoside 100% Biosourced	Liquid	12,6	Non-ionic surfactant, no cloud point, readily biodegradable, suitable for highly alkaline or electrolytic media, higher foam and better foam stability than usual anionics, effective surfactant for hand dishwashing liquids, exceptional skin tolerance
SIMULSOL™ SL 11 W	Undecyl glucoside	Liquid	12,4	Non-ionic surfactant, excellent wetting agent, no cloud point, suitable for highly alkaline or electrolytic media
SIMULSOL™ SL 26 C	Decyl & Hexadecyl glucoside	Liquid	12	W/O Emulsifier, non toxic and readily, biodegradable, applicable to emulsifying fluids oil based drilling muds, cases where emulsions may be chosen to sweep wellbores or flowlines of certain deposits, superior compatibility in strong acid and alkali systems, and electrolyte solutions, no cloud point and not temperature sensitive
SIMULSOL™SL 826	Octyl & Hexadecyl glucoside	Liquid	13	Non-ionic surfactant, no cloud point, readily biodegradable, suitable for highly alkaline or electrolytic media, stable at all pH, highly compatible with anionic or cationic surfactants, excellent surface active properties: wetting, penetrating, etc., hydrotrope effect to help solubilize other ingredients
SIMULSOL™MAS 48	Alkyl Polyglucosides blend	Liquid	14	Non foaming alkylpolyglucoside, solubilizer of non-ionic surfactants in high caustic soda systems, non ionic, environmentally safe

EC: Emulsifiable Concentrate

EW: Emulsion Oil in Water

ME: Micro-Emulsion

OD: Oil Dispersion

SC: Suspension Concentrate

Castor Oils EO	Composition	Form @25°C	HLB	Functions
SURFOM® R 50	Castor oil 5 EO	Liquid	3,9	Emulsifier EC, EW, ME, SE
SURFOM® R 150	Castor oil 15 EO	Liquid	8,3	Emulsifier EC, EW, ME, SE
SURFOM® R 200	Castor oil 20 EO	Liquid	9,9	Emulsifier EC, EW, ME, SE
SURFOM® R 300	Castor oil 30 EO	Liquid	11,5	Emulsifier EC, EW, ME, SE
SURFOM® R 360	Castor oil 36 EO	Liquid	12,6	Emulsifier EC, EW, ME, SE
SURFOM® R 400	Castor oil 40 EO	Liquid	13,2	Emulsifier EC, EW, ME, SE
SURFOM® R 540	Castor oil 54 EO	Solid	14,4	Emulsifier EC, EW, ME, SE
Ultrasol RSO 60	Rape seed oil 60 EO	Solid	15	Emulsifier EC, EW, ME, SE

FURTHER INFORMATION

- Ethoxilated castor oil with different EO contents (different HLB)
- Vegetable derived non ionic with as general emulsifiers and solubilizers
- Good biodegradation inferring in sustainable alternatives to NP ethoxilados
- Same CAS number 61791 12 6
- Emulsifier for EC, EW, ME
- They can be used with anionic alkyl benzene sulfonate like SURFOM CE 1287

Fatty Alcohols Ethoxylates	Composition	Form @25 °C	HLB	Functions
ALKONAT® L 30	Lauryl alcohol 3 EO	Liquid	8,3	Emulsifier, Wetting agent EC, EW, ME, SE, OD
ALKONAT® L 60	Lauryl alcohol 6 EO	Liquid	11,5	Emulsifier, Wetting agent, Adjuvant EC, EW, ME, SC, SE, OD, SL
ALKONAT® L 70	Lauryl alcohol 7 EO	Liquid	12,1	Emulsifier, Wetting agent, Adjuvant EC, EW, ME, SC, SE, OD, SL
ALKONAT® L 90	Lauryl alcohol 9 EO	Liquid	13,4	Emulsifier, Wetting agent, Adjuvant EC, EW, ME, SC, SE, OD, SL
ALCONAT® L 100	Lauryl alcohol 10 EO	Solid	13,9	Emulsifier, Wetting agent, EC, EW, ME, SC
ALKONAT® L 230	Lauryl alcohol 23 EO	Liquid	16,9	Emulsifier, Dispersant EC, EW, ME, SC
ALKONAT® OC 100	Oleyl cetyl alcohol 10 EO	Solid	15,3	Emulsifier, Wetting agent
ALKONAT® C 200	Cetyl alcohol 20 EO	Solid	15,4	Emulsifier EC, EW, ME
ALKONAT® C 250	Cetyl alcohol 25 EO	Solid	-	
ALKOSYNT® ID 30	Isodecyl alcohol 3 EO	Liquid	9,1	Emulsifier EC,EW,ME,OD
ALKOSYNT® ID 60	Isodecyl alcohol 6 EO	Liquid	12,5	Emulsifier, Wetting agent EC, EW, ME, SC, SE, WP, WDG, SL, OD
ALKOSYNT® IT 30	Isotridecyl alcohol 3 EO	Liquid	7,9	Emulsifier, Wetting agent EC, EW, ME, SC, SE, OD
ALKOSYNT® IT 60	Isotridecyl alcohol 6 EO	Liquid	11,2	Emulsifier, Wetting agent EC, EW, ME, SC, SE, OD
ALKOSYNT® IT 80	Isotridecyl alcohol 8 EO	Liquid	12,8	Emulsifier, Wetting agent EC, EW, ME, SC, SE, WP, WDG, SL, OD
ALKOSYNT® IT 90	Isotridecyl alcohol 9 EO	Liquid	13,3	Emulsifier, Wetting agent EC, EW, ME, SC, SE, WP, WDG, SL, OD
ALKOSYNT® IT 100	Isotridecyl alcohol 10 EO	Liquid	13,8	Emulsifier, Wetting agent EC, EW, ME, SC, WP, WDG, SL, OD
ALKOSYNT® IT 120	Isotridecyl alcohol 12 EO	Liquid	14,5	Emulsifier, Wetting agent EC, EW, ME, SC, WP, WDG, SL, OD
ALKOSYNT® 130	Undecyl alcohol ether 3 EO	Liquid	8,7	Emulsifier, Wetting agent SC, WP, WDG, SL, OD
ALKOSYNT® 150	Undecyl alcohol ether 5 EO	Liquid	11,2	Emulsifier, Wetting agent EC, EW, ME, SC, SE, WP, WDG, SL, OD
ALKOSYNT® 170	Undecyl alcohol ether 7 EO	Liquid	12,8	Emulsifier, Wetting agent EC, EW, ME, SC, SE, WP, WDG, SL, OD
ALKOSYNT® 190	Undecyl alcohol ether 9 EO	Solid	13,9	Emulsifier, Wetting agent EC, EW, ME, SC, WP, WDG, SL, OD
ALKOSYNT® 2530	C12-15 alcohol ether 3 EO	Liquid	-	Emulsifier OD
ALKOSYNT® 2570	C12-C15 alcohol ether 7 EO	Liquid	12,0	Emulsifier EC, EW, ME, OD
ALKOSYNT® 2590	C12-C15 alcohol ether 9 EO	Liquid	13,3	Emulsifier EC, EW, ME, OD
ALKOSYNT® 9125	C9-C11 alcohol + 2,5 EO	Liquid	8,5	Emulsifier OD
ALKOSYNT® 9140	C9-C11 alcohol + 4 EO			
ALKOSYNT® 9160	C9-C11 alcohol + 6 EO	Liquid	-	Wetting agent SE
ALKOSYNT® 9180	C9-C11 alcohol + 8 EO	Liquid	13,9	Wetting agent SE

EC: Emulsifiable Concentrate

EW: Emulsion Oil in Water

ME: Micro-Emulsion

OD: Oil Dispersion

SC: Suspension Concentrate

Polymeric Surfactants and Fatty Alkanolamides	Composition	Form @25 °C	HLB	Functions
SIMALINE™ WO	Polyethylene glycol (PEG) 30	Liquid	5,5	Excellent water-in-oil emulsifier, effectively stabilizes all types of oils at low concentrations with textures ranging from lotions to thick creams, due to its supple paste form, easy to use at temperatures from 40°C, can be used to formulate water-rich W/O emulsions, with up to 80% aqueous phase, effective at low concentrations: ranging from 0.2% to 4%

Polysorbates EO	Composition	Form @25°C	HLB	Functions
SURFOM® 1352	Sorbitan monolaurate 40 EO	Liquid	10,2	Emulsifier EC, EW, ME, SE
SURFOM® CE 8928	Sorbitan monolaurate 16 EO	Liquid	17,0	Emulsifier EC, EW, ME, SE, OD
ALKEST® TW 20	Sorbitan monolaurate 20 EO	Liquid	16,7	Emulsifier, Wetting agent, Adjuvant EC, EW, ME, SC, SE, WP, WDG, SL
ALKEST® TW 80	Sorbitan monolaurate 20 EO	Liquid	15,0	Emulsifier, Wetting agent, Adjuvant EC, EW, ME, SC, SE, WP, WDG, SL
ALKEST® TW 85	Sorbitan trioleate 20 EO	Liquid	-	-
MONTANOX™ 60 DF	Polysorbat 60	Liquid to gel	14,9	Hydrophilic emulsifying and solubilizing surfactants, form oil in water (O/W) emulsions and solubilize active ingredients, tolerant to electrolytes and variations of pH, 100% of active matter, low impurity content and little coloration, soluble or dispersible in water and in most organic solvents, compatible with all surfactants and other anionic and cationic ingredients, exceptional tolerance on contact with cutaneous tissues.
MONTANOX™ 80 VG DF	Polysorbat 80 <i>Vegetable grade</i>	Liquid	15	
MONTANOX™ 85VG DF	Polysorbat 85 <i>Vegetable grade</i>	Liquid	11	



- Non-ionic surfactant based in ethoxylated sorbitanesters
- Low content of water (less than 1%)
- Emulsifier for EC and OD formulation.
- Uptake enhancer in tank mix adjuvants or built-in formulation
- Easy to use product.
- Considered low/no irritant

Appearance, 25 °C	Liquid yellowish
pH, 5% aqueous solution, 25 °C	About 6,8
Pour Point, °C	About 5 °C
Density, g/cm ³ , 25 °C	1,9
Solubility in water, 25 °C (77 °F)	Soluble
Viscosity, cP, 25 °C (77 °F)	655

Rapeseed Oil Ethoxylates	Composition	Form @25 °C	HLB	Functions
SEPICGREEN™ C 100	Rapeseed oil ethoxylated with 10 moles of ethylene oxide	Liquid	6,8	Ethoxylated rapeseed oils combine the solvent properties of oils and the emulsifying properties of surfactants. As they are non-ionic, they are compatible with other surfactants. They can be used to formulate most active ingredients used in crop protection products: herbicides, fungicides, insecticide. Easy to formulate. Readily biodegradable. pH neutral
SEPICGREEN™ C 200	Rapeseed oil ethoxylated with 20 moles of ethylene oxide	Liquid	8,9	
SEPICGREEN™ C 300	Rapeseed oil ethoxylated with 30 moles of ethylene oxide	Liquid	11,5	

SE: Suspo-Emulsion

SG: Water Soluble Granule

SL: Soluble Liquid

WG: Water Dispersible Granule

WP: Wettable Powder

Sorbitan Esters	Composition	Form @25 °C	HLB	Functions
MONTANE™ 20	Sorbitan laurate	Liquid	8,6	Derived from monoester, sesquiester or triester of the following acids: lauric, palmitic, stearic, isostearic and oleic, emulsifiers are low coloured products, with a faint odour and low impurities content., grades have an HLB (Hydrophilic / Lipophilic Balance) range from 1.8 to 8.6, compatible with all surfactants and with electrolytes, not sensitive to pH variation, are introduced in the oily phase. This oily phase and the aqueous phase, which contains one or more hydrophilic emulsifiers, are heated separately to approximately the same temperature before emulsification. The aqueous phase is added to the oil phase while stirring. The resulting emulsion is cooled under stirring and homogenized if necessary.
MONTANE™ 40	Sorbitan palmitate	Solid	6,7	
MONTANE™ 60	Sorbitan stearate	Solid	4,7	
MONTANE™ 65	Sorbitan tristearate	Solid	2,1	
MONTANE™ 80	Sorbitan oleate	Liquid	4,3	
MONTANE™ 80 VG	Sorbitan oleate Vegetable grade	Liquid	4,3	
MONTANE™ 83 VG	Sorbitan sesquioleate Vegetable grade	Liquid	3,7	
MONTANE™ 85 SPI	Sorbitan trioleate	Liquid	1,8	

TSP's EO	Composition	Form @25°C	HLB	Functions
SURFOM® CE 8214	Tristyrylphenol 10 EO	Liquid	10,1	Emulsifiable Concentrate (EC), Suspension Concentrate (SC), Suspo Emulsion (SE), Concentrate Emulsion (EW), Micro Emulsion (ME)
SURFOM® CE 1299	Tristyrylphenol 16 EO	Liquid	12,7	
SURFOM® 1432 CE	Tristyrylphenol 18 EO	Liquid	23,5	
SURFOM® CE 8110	Tristyrylphenol 25 EO	Solid	14,5	
SURFOM® 1420 CE	Tristyrylphenol 29 EO	Solid	15,2	
SURFOM® CE 2012	Tristyrylphenol 54 EO	Solid	17,1	



- Strong adsorption to solid particles
- Compatibility with a large number of active ingredient molecules
- Emulsifying, wetting and dispersing properties
- Improve formulation stability at different pH ranges
- Good toxicological profile
- Ethoxylated castor oil with different EO contents differente HLB)
- Vegetable derived non ionic with as general emulsifiers and solubilizers
- Good biodegradation infrering in sustainable alternatives to NP ethoxilados
- Same CAS number 61791 12 6
- Emusifier for EC, EW, ME
- They can be used with anionic alkyl benzene sulfonate like SURFOM CE 1287

Appearance, 25°C	Viscous liquid
HLB calculated	12,7
Hydroxyl value, mgKOH/g	Approx.52
Cloud point, 1% in water, °C	Approx. 62
Water, %	Approx. 0,5
pH, 1% in water, 25°C	About 7
Density, g/cm ³ , 25°C	1,100
Solubility in water, 25°C	Soluble
Pour Point, °C	Approx. 15

Products Agrochemical Solvents



Green Solvents	Composition	Form @25 °C	Green Solvents	Composition	Form @25 °C
ISOPENTANOL	Isoamyl alcohol	Liquid	SURFOM® EMS 2000	Soybean oil methyl ester	Liquid
ISOPENTYL ACETATE	Isoamyl acetate	Liquid	SURFOM® CE 8434	Fatty short chain acid methyl ester	Liquid
SEC BUTANOL	Secondary butanol	Liquid			



SURFOM® EMS 2000
SURFOM® CE 8434

SURFOM® EMS 2000 **Soybean Methyl Ester**

- Excellent solvency many active ingredients
- Low solubility in water. Ideal for EC and ODs formulations.
- Improves efficacy by a better spreading of the active and by enhancing leaf penetration
- Biodegradable base renewable sources.
- It has a high boiling point and it is not classified as Volatile Organic Compound

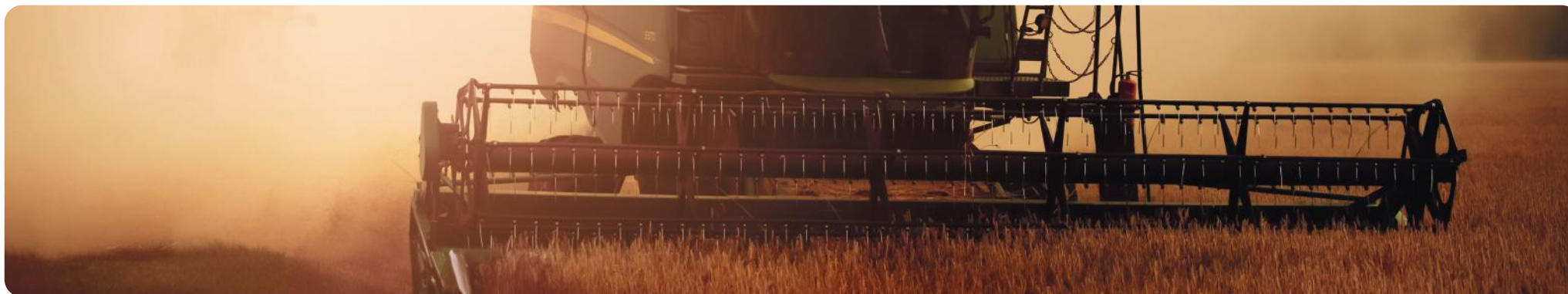
SURFOM® CE 8434 **GHS Friendly Solvent For Liquid Formulations**

- Capric/Caprylic Methyl Ester based solvent
- Improved GHS profile
- Low Phytotoxicity
- Emulsifiable
- Application in EC, SE and EW formulations
- Good solvency of a wide range of Herbicides, Insecticides and Fungicides

Solvents	Composition	Form @25 °C
ETHYLDIGLYCOL	Ethyl diglycol	Liquid

Amines	Composition	Form @25 °C
MONOETHANOLAMINE	Monoethanolamine	Liquid
TRIETHANOLAMINE	Triethanolamine	Liquid

Products Agrochemical Rheology Modifiers



Products	Composition	Function
OUVROPOL 23	Xanthan gum	Standard grade. Shear thinning and yield properties with a rapid hydration rate. Thickening agent for liquid gel formulations. Aids vertical cling
OUVROPOL 50MD	Xanthan gum	Extremely easy hydration
OUVROPOL extra 2 clear	Xanthan gum	Cost-efficient in mild acidic media. Highly pseudo plastic. It is particularly useful for thickening and stabilizing. Fast solubilization and processing in acidic media. Non GMO, suitable for clear formulations
OUVROPOL G	Xanthan gum	Extremely easy dispersible – no dust
OUVROPOL T	Xanthan gum	Clear grade for transparent formulations
OUVROPOL TG	Xanthan gum	Xanthan Gum with a capacity of Dispersion extremely easy – no dust for transparent formulations
SOLAGUM™ SF306	Polyacrylamide & Isoparaffine & Ethoxylated alcohol	Outstanding compatibility with alkaline media.
SOLAGUM™ SJ 108		Increases viscosity of oils and waxes.
SOLAGUM™ SH 210		Solvent thickener.
SOLAGUM™ USPI	Polyacrylamide & Isoparaffine & Polysorbate	Suspending properties. Emulsifier of oily phases, including silicone.
SOLAGUM™ AX	Acacia & Xanthan gum	Fully bio-sourced grade in powder, suspending properties, translucent gels.

Our Partners & Products

HARKE GROUP serves the agrochemical industry for more than 25 years and today retains a market leading position. Constantly, we continue to expand our range of products introducing new, safe, environmentally respectful and cost-effective additives. We offer innovative products of excellent suppliers and assist you concerning the formulation of new products. Our technical team provide you detailed product information and keep you informed about the latest trends.



Agrochemical Specialties

The Tensiofix® surfactant range consists of in-house developed emulsifiers, wetting-dispersing agents and other additives specifically designed for crop care formulations.

- Tensiofix®



Surfactants

CROP SOLUTIONS EUROPE Leading multinational producer of surfactants and specialty chemicals.

- Alkosynt®
- Surfom®
- Ultraric®



Rheologymodifier

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

- Ouvropol



Unique Ingredients, Created for Products Used Every Day

Created a wide range of high-performance ingredients that are easy to use and increasingly environmentally friendly, for a number of industries.

- Simulsol™
- Montaline
- Solagum™

Our CleanSolutions

#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 in water-soluble film until the final product.



COMMERCIAL EXCELLENCE

With more than 15 years experience in handling and more than 50 years in distributing water-soluble foils, we put your individual requirements in the heart of our activities.

MIXING, BLENDED & MASS PRODUCTION

Our mixing & blending team as also our packing team 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.

DEVELOPMENT

We offer excellence in innovative capsule concepts. 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 of suitable compositions and selection of the compatible film types.

RAW MATERIALS & FILMS

With several years of experience in the development of innovative products, we focus on our customer needs. We support you with the full technical and commercial services, from the sourcing of raw materials to the compatible PVA specialized foils for your compositions. We support you with the full technical and commercial services, from the sourcing of raw materials to the compatible PVA specialized foils for your compositions.

TESTING & TEST FILLINGS

To confirm the compatibility of your formulation with the film there will be test done in the climate chambers. Additional test fillings will proof your concept. Transparent communication, minimizing costs and enhancing your benefits – that is our contribution to your success.



Our Commitment To Sustainability

As a family business, sustainability is in our genes, as we do not think in quarterly reports but in generations.

Furthermore, as an internationally acting distributor it is our primary task to save transaction costs, i. e. the use of resources, as much as possible, by combining product ranges and deliveries of various suppliers for our customers.

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. Consequently, we put a dedicated sustainability task force in place with the goal to set targets and to transfer them into the daily HARKE business processes, company culture and interfaces with our partners.

Let us 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.

Why HARKE

one group of **16** companies | **17** offices in Europe | **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 GROUP



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HARKE GROUP



**ONE PARTNER.
ONE RESPONSIBILITY.**