



Ask us for your solutions



Agricultural solutions – product portfolio
Europe

Nouryon



We are Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. You can count on the dedication of all our employees with a shared commitment to our customers, business growth, safety, sustainability and innovation. We operate in over 80 countries around the world with a portfolio of industry-leading brands.



The right partner with the right solutions for your agribusiness needs

Nouryon strives to be our customers' first choice for essential agriculture and food science solutions. We make significant investments in research and development, and we never stop searching for new and innovative solutions that are effective and more sustainable. Nouryon also offers international production and logistics capabilities to ensure a consistent and reliable supply of the agriculture and food solutions that customers and partners depend on daily.



Annually investing in Research and Development (R&D) and innovation



16 production facilities across 6 countries on 4 continents for international supply of agriculture and food solutions



Ongoing investments in production facilities to scale capacity to meet evolving customer needs



A **network of third parties** to better manage volatility in the global supply chain

We will design and supply
the ultimate solutions for
your needs
Today and tomorrow



¹⁾ 1% in water ²⁾ Draves test ³⁾ Griffin/Davis *	GENERAL CHARACTERISTICS										SOLUBILITY		FUNCTIONALITY & USE		
	Physical form (20°C)	Description	Active content	Water content	pH ¹⁾	CMC g/l	Surface tension mN/m	Contact angle	Wetting power ²⁾ 1g/l	HLB ³⁾	Water	Veg oil	Application area	Function	Prime use
ADJUVANTS															
Adsee™ 900	Liquid	Fatty alcohol ethoxylate	NR	NR	5-7	1.0	26	41	5 sec	NA	Soluble	Dispersible	TM	Penetrant, wetter	Fungicides, Sulfonylureas, hydrophobic actives
Adsee™ AB 615	Liquid	Oleyl alkoxyated amine	NR	NR	6-9	0.01	33	51	24 sec	NA	Soluble	Insoluble	SL, SC, SE, TM	Penetrant, retention	Multipurpose
Adsee™ AMP40	Liquid	Amphoteric	NR	NR	8.5-9.5	13.3	64	102	>5 min	25	Soluble	Insoluble	SL, SC, EW, ME	Humectant, penetrant, compatibilizer	Glyphosate, Glufosinate and fungicides
Adsee™ C80W	Liquid	Cocoamine propyl amide	NR	NR	9-12	0.02	27	41	>5 min	22.9	Dispersible	Dispersible	SC, SL, WDG	Penetrant, compatibilizer	Glyphosate, herbicides mixtures and fungicides
Adsee™ Flex 960	Liquid	Patented blend of surfactants and colloidal silica	NR	NR	7-8	NA	58	NA	NA	NA	Soluble	NA	TM	Retention and rainfastness	Fungicides
Ethomeen® C/15	Liquid	Coco amine ethoxylate	NR	NR	11	0.04	29	47	40 sec	13	Soluble	Soluble	SL	Penetrant	Glyphosate
Ethomeen® C/25	Liquid	Coco amine ethoxylate	NR	NR	9-11	41	38	71	>10 min	15	Soluble	Insoluble	SL	Penetrant	Herbicides
Ethylan® 995	Liquid	Fatty alcohol alkoxyate	NR	NR	5-6	>50	31	41	51 sec	NA	Dispersible	Soluble	SC, SE	Penetrant	Fungicides, reduce drift
DISPERSANTS															
Agrilan® 1015	Liquid	Alkoxyated phosphate ester	50%	25%	5.5-6.2	68	32	42	17 sec	NA	Soluble	Insoluble	EW, FC, SC, SE	Dispersant, emulsifier, wetter	Dispersant for aqueous formulations
Agrilan® 1028	Liquid	Phosphate ester ethoxylate	100%	1%	2-3	0.54	25	36	45 sec	NA	Dispersible	Insoluble	SC, SE, SL	Dispersant, compatibilizer	High electrolyte and fertilizer formulations
Agrilan® 782 Dry	White powder	Polyacrylate homopolymer	>95%	≤5%	8-11	50.2	68	111	>5 min	NA	Soluble	Insoluble	SC, FS, WDG, WSG, WP	Dispersant, stabiliser	Universal solid dispersant, especially recommended for biologicals applications
Agrilan® 789 Dry	White powder	Polyacrylate copolymer	95%	<5%	7-9	3.0	42	92	>5 min	NA	Soluble	Insoluble	SC, WDG, WSG, WP	Dispersant, co-dispersant	Premium, high load and multi-active formulations
Agrilan® 855	Liquid	Modified acrylic co-polymer	31-35%	50%	6-8	0.02	48	NA	NA	NA	Soluble	Insoluble	SC, SE	Dispersant, milling aid	Powerful and flexible dispersant
Ethylan® NS-500 K	Solid	Alcohol block copolymer	100%	0.2%	6-7	NA	34	NA	133 sec	14.1	Soluble	Insoluble	SC, SE	Dispersant, emulsifier, wetter	Versatile, standard co-dispersant for SC with Morwet® D-425 Powder
Ethylan® NS-500LQ	Viscous liquid	Alcohol block copolymer	100%	<0.5%	6-8	0.2	36	62	163 sec	NA	Soluble	Insoluble	SC, SE	Dispersant, emulsifier, wetter	Versatile, standard co-dispersant for SC with Morwet® D-425 Powder
Morwet® D-425 Powder	Powder	Alkyl naphthalene sulphonate condensate	≥87%	4%	7.5-10	>25	60	85	>5 min	NA	Soluble	Insoluble	SC, WDG, WSG, WP	Dispersant, milling aid	Robust, universal, reliable performance
Morwet® D-450 Powder	Powder	Alkyl naphthalene sulphonate condensate blend	≥98%	2%	7.5-10.5	NA	42	NA	25 sec	NA	Soluble	Insoluble	SC, WDG, WSG, WP	Dispersant, wetting, milling aid	Designed for improved granule breakdown
Morwet® D-500 Powder	Powder	Alkyl naphthalene sulphonate condensate blend	≥98%	2%	7-9	>50	43	NA	>5 min	NA	Soluble	Insoluble	SC, WDG, WSG, WP	Dispersant, wetting, milling aid	Complete robust solution
Morwet® D-809 Powder	Powder	Alkyl naphthalene sulphonate condensate	≥80%	4%	7.5-10	>25	63	86	>5 min	NA	Soluble	Insoluble	SC, WDG, WSG, WP	Dispersant, milling aid	Premium, hard water tolerant

* Griffin method is used to calculate nonionic surfactants and Davis method is used to calculate amine containing surfactants and anionic surfactants
NA = Not assessed NR = Not relevant
EC = Emulsifiable concentrate, EW = Emulsion, oil in water, FS = Flowable conc. for seed treatment, ME = Microemulsions, OD = Oil dispersions, SC = Suspension concentrate, SE = Suspoemulsions, SL = Soluble liquid, TM = Tankmix, WDG = Water dispersible granule, WP = Wettable powder, WSG = Water soluble granule

1) 1% in water 2) Draves test 3) Griffin/Davis *	GENERAL CHARACTERISTICS										SOLUBILITY		FUNCTIONALITY & USE		
	Physical form (20°C)	Description	Active content	Water content	pH ¹⁾	CMC g/l	Surface tension mN/m	Contact angle	Wetting power ²⁾ 1g/l	HLB ³⁾	Water	Veg oil	Application area	Function	Prime use
WETTING AGENTS															
Adsee™ 900	Liquid	Fatty alcohol ethoxylate	90%	10%	5-7	1.0	26	41	5 sec	NA	Soluble	Dispersible	SC, SL, TM	Wetter, penetrant	Fungicides, Sulfonylureas, hydrophobic actives
Lankropol® 4500	Liquid	Diocylsulfosuccinate in water/ethanol	>68%	22%	5-8	NA	30	69	3 sec	NA	Dispersible	Dispersible	EC, ME, OD, SC, SE, TM	Wetter, emulsifier	Extra fast, no colour
Lankropol® KPH70	Liquid	Diocylsulfosuccinate in mpg/water	70%	11%	5-8	1.6	34	35	4 sec	NA	Opaque sol	Insoluble	EC, ME, OD, SC, SE, TM	Wetter, emulsifier	Extra fast, no colour
Morwet® EFW Powder	Brown powder	Naphthalene sulphonate blend	95%	2%	7.5-10.5	6.0	32	65	17 sec	14	Soluble	Insoluble	SC, WDG, WSG, WP	Wetter	Extra fast wetting, use with Morwet® D-425 Powder
Morwet® IP Powder	Brown powder	Alkylnaphtalene sulfonate	75%	2.5%	7.5-10.5	7.7	50	87	>5 min	12	Soluble	Insoluble	SC, WDG, WSG, WP	Wetter	Low foam
EMULSIFIERS															
Agrilan® 1084	Liquid	Phosphate ester ethoxylate	100%	1%	1-2	0.42	26	48	5 min	NA	Soluble	Soluble	EC, EW, ME, OD, SE	Emulsifier	Combine with nonionics
Agrilan® AEC145	Liquid/paste	TSP-ethoxylate 15 EO	100%	0.5%	6-7	0.015	41	63	6 min	NA	Soluble	Soluble	EW, ME	Emulsifier	Combine with Lankropol® KPH70
Agrilan® F525	Liquid	Tristyryl phenol alkoxylate	100%	0.5%	5-7	NA	NA	NA	NA	NA	Soluble	Insoluble	EC, EW, ME	Emulsifier	Combine with anionic emulsifier
Emulpon™ CO-20	Liquid	Castor oil ethoxylate 20 EO	100%	≤0.5%	6-8	1.16	39	77	>10 min	10.9	Dispersible	Soluble	EC, EW, ME	Emulsifier	Combine with anionic emulsifier
Emulpon™ CO-36	Liquid	Castor oil ethoxylate 36 EO	100%	≤0.5%	6-8	1.18	39	80	>10 min	13.4	Soluble	Soluble	EC, EW, ME	Emulsifier	Combine with anionic emulsifier
Emulpon™ CO-40	Liquid to paste	Castor oil ethoxylate 40 EO	100%	≤0.5%	6-8	2.01	41	73	>10 min	13.8	Soluble	Soluble	EC, EW, ME	Emulsifier	Combine with anionic emulsifier
Emulpon™ CO-54	Paste to solid	Castor oil ethoxylate 54 EO	100%	≤0.5%	6-8	2.5	47	81	>10 min	15	Soluble	Soluble	EC, EW, ME	Emulsifier	Combine with anionic emulsifier
Ethylan® TD 1407E	Liquid	Fatty alcohol ethoxylate	75%	25%	6-8	0.11	29	46	16 sec	7	Soluble	Dispersible	EW, ME, SE	Emulsifier	Combine with anionic emulsifier
Ethylan® NS-500 K	Solid	Alcohol block copolymer	100%	0.2%	6-7	NA	34	NA	133 sec	14.1	Soluble	Insoluble	SC, SE	Dispersant, emulsifier, wetter	Combine with anionic emulsifier
Ethylan® NS-500LQ	Viscous liquid	Alcohol block copolymer	100%	<0.5%	6-8	0.2	36	62	163 sec	NA	Soluble	Insoluble	SC, SE	Dispersant, emulsifier, wetter	Combine with anionic emulsifier
Lankropol® 4500	Liquid	Diocylsulfosuccinate in water/ethanol	>68%	22%	5-8	NA	30	69	3 sec	NA	Dispersible	Dispersible	EC, ME, OD, SE	Wetter, emulsifier	Extra fast, no colour
Lankropol® KPH70	Liquid	Diocylsulfosuccinate in mpg/water	70%	11%	5-8	1.6	34	35	4 sec	NA	Opaque sol	Insoluble	EC, ME, OD, SE	Wetter, emulsifier	Extra fast, no colour
Phospholan® PE169	Liquid	Ethoxylated phosphate ester	100%	<1%	2-3	0.02	28 (pH=6)	37 (pH=6)	23 (pH=6)	NA	Dispersible	Soluble	ME, OD, SC, SE	Emulsifier, dispersant	Water soluble when neutralised, form ME with Agrilan® AEC145
EMULSIFIER BLENDS															
Berol® 9927	Liquid/paste	Nonionic/anionic blend	100%	0.5%	5-7	NA	30	44	10 sec	NA	Soluble	Soluble	EC	Emulsifier blend	Emulsifiers optimized for ECs based on aromatic solvents. Combining these products in pairs will result in stable EC's with excellent emulsification performance. Guide recipes available upon request
Berol® 9960	Paste	Nonionic/anionic blend	100%	0.5%	5-7	NA	31	49	21 sec	NA	Soluble	Dispersible	EC	Emulsifier blend	
Berol® 9968	Liquid	Nonionic/anionic blend	100%	0.5%	5-7	NA	28	37	8 sec	NA	Dispersible	Soluble	EC	Emulsifier blend	
Berol® 9969	Paste	Nonionic/anionic blend	100%	0.5%	5-7	NA	29	40	13 sec	NA	Soluble	Dispersible	EC,	Emulsifier blend	
SOLVENTS															
Armид® DM10	Liquid	C10 dimethyl amide	>97%	<0.3%	NA	NA	NA	NA	NA	NA	Insoluble	Soluble	EC, EW	Oil soluble	Replace aromatic solvents
Armид® DM810	Liquid	C8–10 dimethyl amide	>97%	<0.3%	NA	NA	NA	NA	NA	NA	Dispersible	Soluble	EC, EW	Oil soluble	Replace aromatic solvents
Armид® FMPC	Liquid	Morpholine derivative	100%	0.5%	NA	NA	NA	NA	NA	NA	Soluble	Soluble	EC, EW, SL	Water soluble, co-solvent	NMP replacer, soluble in most solvents
SEED CARE															
Adsee™ D	Liquid	Synthetic co-polymeric blend	27%	72%	8.5-9	NA	NA	NA	NA	NA	Soluble	Insoluble	FS	Binder	Reduce dust-off
Adsee™ ST4	Liquid	Maltodextrin/vinylpyrrolidone polymer	24%	76%	4-6	NA	NA	NA	NA	NA	Soluble	Insoluble	FS	Binder	Reduce dust-off, improve flowability

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Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. Furthermore, the dedication of approximately 8,200 employees with a shared commitment to our customers, business growth, safety, sustainability and innovation has resulted in a consistently strong financial performance. We operate in over 80 countries around the world with a portfolio of industry-leading brands. Visit our website and follow us @Nouryon and on LinkedIn.

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