



Content

- **04** About **ELEMENTIS**
- **06** Rheology Modifiers

BENTONE® clays

BENTONE® organoclays

RHEOLATE® NISAT

RHEOLATE® ASE & HASE

THIXATROL® organic thixotropes

- **36** Anti-settling Agents
- **40** Wetting & Dispersing Agents

NUOSPERSE® wetting and dispersing agents

48 Defoamers and Specialties

DAPRO® defoamers

SLIP-AYD®

NALZIN® flash rush inhibitors

HYPOMER Matting resins for solvent-borne systems



About ELEMENTIS

Elementis is a leading global supplier of specialty chemicals, delivering essential attributes to a wide range of industries. We provide rheology modifiers and complementary specialty additives to manufacturers of industrial coatings, decorative paints, inks, construction solutions, adhesives and sealants, ceramics, water treatment and oil and gas drilling fluids.

Innovation and sustainability are at the core of our operations. We focus on creating solutions that enhance performance and sustainability for our customers.

Our technology addresses performance needs through rheological additives, wetting and dispersing agents, defoamers, adhesion promoters, and other performance-enhancing additives. Our globally recognized brands, such as BENAQUA®, BENATHIX®, BENGEL®, BENTONE®, CHARGUARD™, DAPRO®, HYPOMER, M-P-A®, NALZIN®, NUOSPERSE®, RHEOLATE®, SLIP-AYD®, SUPREAD®, THIXATROL® and THIXCIN® reflect our commitment to quality and innovation.

We work closely with our customers to develop tomorrow's solutions for bio-based, waterborne, solventborne, and solvent-free systems, enhancing the appearance, feel, workability and stability of their products.

We continue to leverage our expertise in high-performing ingredients to boost our customers' product performance and introduce new technologies to the markets we serve.

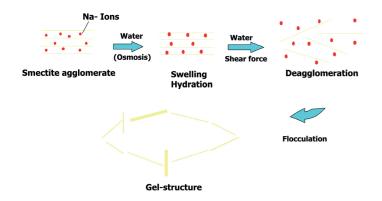
Rheology BENTONE® & BENAQUA® BENTONE®, BENATHIX® & BENGEL® RHEOLATE® THIXCIN® & THIXATROL® THIXATROL® THIXCIN® & THIXATROL® M-P-A® DEURHEO DEURHEO DISPONER NUOSPERSE® NUOSPERSE® DEFONER Humectants NUOSPERSE® DEFONE DEFONE Active Interface Agents DEFONE Active Interface Agents SUPPEAD® <		
BENTONE® & BENAQUA® BENTONE®, BENATHIX® & BENGEL® RHEOLATE® THIXCIN® & THIXATROL® THIXATROL® M-P-A® DEURHEO DEURHEO DISPONER NUOSPERSE® NUOSPERSE® DISPONER BENATHIX® Humectants WIOSPERSE® DEFOMER DAPRO® DF DEFOMER DEFOM ACTIVE Interface Agents DEFOM ACTIVE Interface Agents SUPPADO® SUPPADO® SUPPADO® SUP-AYD® SUP-AYD® SUP-AYD® LEVASUP LEVASUP LEVELOL Corresion Inhibitors NALZIN® NALZIN® ACRESSION Agents DAPRO® FX ACRESSION AGENTS DAPRO® ACP ADHERANT Matting resin HyPOMER Hydrophobically Modified Silica Hydrophobically Modified Silica	Aqueous Systems	Non-Aqueous Systems
RHEOLATE® THIXATROL® THIXATROL® THIXCIN® & THIXATROL® M-P-A® M-P-A® DEURHEO DEURHEO DISPORTING Agents NUOSPERSE® NUOSPERSE® DISPONER HUMECTANTS HUMECTANTS NUOSPERSE® DEFORERE® DEFOM DEFORMOP DEFOM Active Interface Agents DEFOM Active Interface Agents DEFOM SUPRAD® SUP-AYD® SUP-AYD® SUP-AYD® SUP-AYD® SUP-AYD® LEVELOL Corrosion Inhibitors NALZIN® LEVELOL Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® FX Adhesion Promoters ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica		
THIXATROL® THIXCIN® & THIXATROL® M.P.A® M.P.A® DEURHEO DEURHEO DISPONER NUOSPERSE® NUOSPERSE® NUOSPERSE® NUOSPERSE® DEFONER NUOSPERSE® DAPRO® DE DEFORM DAPRO® DF DAPRO® DF Active Interface Agents DAPRO® SUPRAD® SUP-AYD® SLIP-AYD® SLIP-AYD® SLIP-AYD® Corrosion Inhibitors NALZIN® LEVELOL Corrosion Inhibitors NALZIN® SAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica		BENTONE®, BENATHIX® & BENGEL®
MP-A® DEVRHEO Dispersing and Wetting Agents NUOSPERSE® NUOSPERSE® DISPONER NUOSPERSE® Humectants WENTER AGENTAL	RHEOLATE®	
DEURHEO	THIXATROL®	THIXCIN® & THIXATROL®
Dispersing and Wetting Agents NUOSPERSE® NUOSPERSE® DISPONER Humectants NUOSPERSE® Image: Imag		M-P-A®
NUOSPERSE® NUOSPERSE® DISPONER Humectants NUOSPERSE® Image:		DEURHEO
DISPONER Humectants NUOSPERSE® Image: Company of the company o	Dispersing and Wetting Agents	
Humectants NUOSPERSE® □ Defoamers □ DAPRO® DF □ Company □ DAPRO® □ Active Interface Agents □ DAPRO® □ SUPREAD® □ SLIP-AYD® □ LEVASLIP □ LEVELOL □ Corrosion Inhibitors □ NALZIN® □ Coalescing Agents □ DAPRO® FX □ Adhesion Promoters □ DAPRO® ACP ADHERANT Matting resin □ HYPOMER □ Hydrophobically Modified Silica □	NUOSPERSE®	NUOSPERSE®
NUOSPERSE® Defoamers DAPRO® DF DAPRO® DF DAPRO® DF DEFOM Active Interface Agents The control of the control o	DISPONER	
Defoamers DAPRO® DF DAPRO® DF DEFOM Active Interface Agents DAPRO® SUPREAD® SUIP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP Matting resin HYPOMER Hydrophobically Modified Silica	Humectants	
DAPRO® DF DEFOM Active Interface Agents DAPRO® SUPREAD® SULP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP Adherant Matting resin HYPOMER Hydrophobically Modified Silica	NUOSPERSE®	
Active Interface Agents DAPRO® SUPREAD® SUIP-AYD® SLIP-AYD® LEVASLIP LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ABHERANT Matting resin HYPOMER Hydrophobically Modified Silica	Defoamers	
Active Interface Agents DAPRO® SUPREAD® SLIP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	DAPRO® DF	DAPRO® DF
DAPRO® SUPREAD® SLIP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica Hydrophobically Modified Silica		DEFOM
SUPREAD® SLIP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	Active Interface Agents	
SLIP-AYD® SLIP-AYD® LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	DAPRO®	
LEVASLIP LEVELOL Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	SUPREAD®	
Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	SLIP-AYD®	SLIP-AYD®
Corrosion Inhibitors NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP Matting resin HYPOMER Hydrophobically Modified Silica		LEVASLIP
NALZIN® Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica		LEVELOL
Coalescing Agents DAPRO® FX Adhesion Promoters DAPRO® ACP Matting resin HYPOMER Hydrophobically Modified Silica	Corrosion Inhibitors	
DAPRO® FX Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	NALZIN®	
Adhesion Promoters DAPRO® ACP ADHERANT Matting resin HYPOMER Hydrophobically Modified Silica	Coalescing Agents	
DAPRO® ACP Matting resin HYPOMER Hydrophobically Modified Silica	DAPRO® FX	
Matting resin HYPOMER Hydrophobically Modified Silica	Adhesion Promoters	
HYPOMER Hydrophobically Modified Silica	DAPRO® ACP	ADHERANT
HYPOMER Hydrophobically Modified Silica	Matting resin	
	Hydrophobically Modified Silica	
	DUMACIL®	



Rheology Modifiers

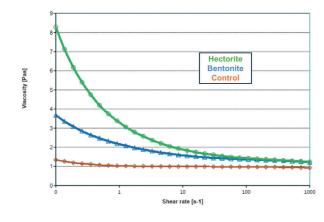
BENTONE® Clays for aqueous systems

Hectorite, a naturally occurring clay mineral, is particularly notable for its unique properties and efficiency as a rheology modifier. It is a lithium magnesium silicate that swells due to the hydration of sodium ions located on the clay platelets, which push the platelets apart and allow the clay to form a gel-like structure.



Hectorite's distinctive platelet shape and high surface area make it exceptionally effective in building viscosity and providing sag control and suspension properties in WB systems.

Due to the much smaller particle size of the hectorite (compared to bentonite) the pseudoplasticity created in a system is much stronger and BENTONE® hectorites are more efficient:



BENTONE® clays benefits:

- Long-term rheological stability of the formulation)
- Film/ bead (thickness) control
- Suspension of particles resulting in homogeneous matrix and smooth surfaces
- Workability improved spray process/ extrusion
- In construction products: improved sag/slump stability, less pumping pressure necessary, easier cleaning of application tools and reduced stickiness when (partially) replacing cellulosics
- Hectorite is a material of natural origin and we use environmentally friendly extraction procedures and strict zero waste and circular policy in cleaning and milling procedures.





Without clay

With clay

				Shear Rate			Ind	ustry		Ava	ilability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Clays - Waterborn	ne										
BENTONE® DE	Hyperdispersible hectorite clay	 Imparting strongly thixotropic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Ideal also for spray application and orientation of effect pigments. Higher efficiency compared to other smectite clays. Option for pregels with loading up to 14% hectorite clay and still pourable intermediate. 	• • •			•	•	•	•	•	•
BENTONE® DY	Organically modified smectite clay	 Improvement of storage stability (anti -syneresis; anti-settlement); especially for pigment and filler preparations. Stable in systems in a wide range of pH 1-12. Providing stable viscositiies in silicate systems. 	•	•		•	•	•	•	•	•
BENTONE® LT	Organically modified hectorite clay	 Imparting strongly thixotropic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging) and improved application properties for decopaints ("application feel") due to impact on mid-shear-viscosity. 	• • •	• •				•	•	•	•
BENTONE® HC	Refined hectorite clay	Special grade for water treatment (e.g. paint coagulation).	• • •							•	•
BENTONE® CT	Hectorite clay	 Imparting strongly thixotropic flow characteristics and suspension control in construction systems resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging) and and improved workability by trowel. Minimum 50% hectorite content. "Whiter" material. 	• • •			•	•	•	•	•	•
BENTONE® OC	Hectorite clay	 Imparting thixotropic flow characteristics and suspension control in construction systems resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging) and improved workability by trowel. Ca. 50% hectorite content. "Less white" material. 	• • •			•	•	•	•	•	•
BENTONE® DH	Organically modified hectorite clay	Modified clay thixotrope alternative to cellulosic thickeners.	• • •			•	•	•	•	•	•
BENTONE® AD	Refined Hectorite clay	Hectorite for automotive base coats and industrial applications	• • •			•	•	•	•	•	•
BENTONE® EW-NA	Refined Hectorite clay	Hectorite clay for suspension control for waterborne systems.	• • •			•	•	•	•	•	•
BENTONE® GS	Refined Hectorite clay	Hectorite clay for waterborne adhesives/sealants and construction systems.	• • •					•	•	•	•
BENTONE® HC	Refined Hectorite clay	Refined hectorite for waterborne adhesives, sealants and high PVC emulsion paints.	• • •			•	•	•	•	•	•
BENTONE® HD	Refined Hectorite clay	Hyperdispersible hectorite clay for industrial coatings.	• • •				•			•	•
BENTONE® MA	Refined Hectorite clay	Hectorite clay for waterborne systems.	• • •			•	•	•	•	•	•
BENTONE® WBS	Refined Bentonite clay	Bentonite clay for waterborne systems.	• • •			•	•	•	•	•	•

^{• • •} highly recomended • • recommended • suitable

				Shear Rat	•		Ind	ustry		Avail	lability
Product Name	Chemistry	Description and key benefits	Lov	w Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Clays - Waterborn	пе										
BENAQUA® 4000	Refined Hectorite clay	 Influence on low- and mid-shear-viscosity and fast viscosity/ structure recovery in combination with suspension control resulting in storage stability (antisedimentation). Film-thickness control (slump resistance) for textured and high-built systems, adhesive, sealants and construction systems. Partial replacement of cellulosis for less "stickiness" leading to improved application feel and stable slump resistance. 	• •	•				•	•	•	•
BENAQUA® 5000	Modified Hectorite clay	Hectorite clay based blend.Suitable for constrcution application.Very cost-effective in sagging control.	• •	•				•	•	•	•

^{• • •} highly recomended • • recommended • suitable

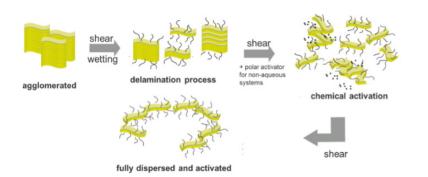
13



BENTONE® Organoclays for non-aqueous systems

PERFORMANCE SPECIALTIES

Hectorite modified with quaternary ammonium compounds becomes an organoclay suitable for solvent-borne systems. This modification process transforms the hydrophilic nature of the clay into a more organophilic (oil-loving) form, making it highly effective in non-aqueous systems, making it a versatile additive for different formulations.



Activation process

BENTONE® organoclays benefits:

- Enhanced stability (e.g. anti-sedimentation)
- Film/ bead (thickness) control
- Suspension of particles resulting in homogeneous matrix and smooth surfaces
- Enhanced workability (spray/ extrusion)
- Orientation of effect pigments
- In powder coating applications: uniform edge coverage, texture effects possible and improved bulk flow and corrosion resistance
- For activation at low-shear forces, we offer high-dispersable grades, such as our BENTONE SD®



Pregel without/ with polar activator

				Shear Rate			Indus	try		Avail	ability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Organoclays -	Solventborne										
BENTONE® 34	Organically modified smectite clay	 For use in low to mid polarity solvent containing systems. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator recommended. 	•	•		•	•			•	•
BENTONE SD® 1	"Superdispersable" organically modified smectite clay	 For use in low to mid polarity solvent containing systems. Lower shear forces needed for proper delamination/ activation of the clay. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator might enhance the performance especially in aromatic free systems. 	•	•		•	•			•	•
BENTONE® 54	Organically modified smectite clay	 For use in low to intermediate polarity organic systems. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator recommended. 	٠	•		•	•			•	•

recommended

				Shear Rate			Inc	lustry		Avail	lability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Organoclays - S	Solventborne										
BENTONE® 1000	Organically modified smectite clay	 For use in low to intermediate polarity (and solvent-free) systems. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator recommended. 	•	•		•	•			•	•
BENTONE® 38	Organically modified smectite clay	 For use in low to higher polarity formulations. Imparting strongly pseudoplastic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Ideal also for spray application. Significantly higher efficiency compared to other smectite clays. Use of polar activator recommended. 	•	•	•		•			•	•
BENTONE SD® 3	"Superdispersable" organically modified hectorite clay	 For use in low to higher polarity formulations. Lower shear forces needed for proper delamination/ activation of the clay. Imparting strongly pseudoplastic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Ideal also for spray application. Significantly higher efficiency compared to other smectite clays. Use of polar activator might enhance performance. 	•	•	٠		•			•	٠
BENTONE® 27	Organically modified hectorite clay	 For use in mid to high polarity formulations. Imparting strongly pseudoplastic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Significantly higher efficiency compared to other smectite clays. Use of polar activator recommended. 		•	٠		•			•	•
BENTONE SD® 2	"Superdispersable" organically modified smectite clay	 For use in moderate to high polarity applications. Lower shear forces needed for proper delamination/ activation of the clay. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator might enhance performance. 		•	•		•			•	•
BENATHIX®	Organically modified smectite clay	 Easy dispersible clay for unsaturated polyester, plastisols and putties. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator recommended. 		•	•		•			•	•
BENTONE® NP-10	Organically modified Bentonite clay	 Efficient, easy-to-use organoclay. Ideal rheological additive for inks formulated with petroleum/vegetable oils and low polarity solvents. 								•	•
BENTONE® 57	Organically modified Bentonite clay	 For use in mid to high polarity formulations. Imparting strongly pseudoplastic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Significantly higher efficiency compared to other smectite clays. Use of polar activator recommended. 		•	•		•			•	•
BENTONE® 52	Organically modified Bentonite clay	 For use in low to higher polarity formulations. Imparting strongly pseudoplastic flow characteristics and suspension control resulting in storage stability (anti-sedimentation). Film-thickness control (anti-sagging). Ideal also for spray application. Significantly higher efficiency compared to other smectite clays. Use of polar activator recommended. 	•	•	•		•				

recommended

				Shear Rate			Indu	stry		Avai	lability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Organoclays -	Solventborne										
BENTONE® 30	Organically modified smectite clay	 For use in low to intermediate polarity organic systems. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator recommended. 	•	•		•	•			•	•
BENGEL® 434	Organically modified smectite clay	 General purpose organoclay. Designed for low to medium polarity aliphatic and aromatic coating systems. 	•	•		•	•				•
BENGEL® 818	"Superdispersable" organically modified smectite clay	 For use in low to mid polarity solvent containing systems. Lower shear forces needed for proper delamination/ activation of the clay. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator might enhance the performance especially in aromatic free systems. 	•	•		•	•				•
BENGEL® 828	"Superdispersable" organically modified smectite clay	 For use in moderate to high polarity applications. Lower shear forces needed for proper delamination/ activation of the clay. Imparting pseudoplastic flow characteristics resulting in storage stability (antisedimentation) and film-thickness control (anti-sagging). Ideal also for spray application. Use of polar activator might enhance performance. 		•	٠		•				•
BENGEL® 908	Organically modified Bentonite clay	 For use in low to medium polarity solvent-based coating systems. General purpose organoclay designed for aliphatic and aromatic coatings. Cost-effective rheological additive, requiring a polar activator. Provides viscosity control and improved application properties. Highly economical choice for low to medium polarity systems. 	•	•		•	•				•
BENGEL® 958	Organically modified Bentonite clay	 For use in low to medium polarity binders and solvent-based systems. Easier dispersibility compared to conventional organoclays. Provides good thixotropy, sag resistance, and anti-settling properties. Easy-to-disperse grade, offering flexibility in manufacturing processes. Recommended for air-dry long oil alkyd enamels, polyurethane sanding sealers, general industrial maintenance, printing inks, sealants, and aliphatic systems. 	•	•		•	•				•

recommended



RHEOLATE® NiSAT - nonionic synthetic associative thickeners for aqueous systems

One of the most significant advantages of ELEMENTIS wide range of RHEOLATE® NiSAT thickeners is their versatility, offering the ability to design taylormade rheology profiles, catering to different shear conditions — low, mid, and high shear.

Being non-ionic, they can be used across a broad pH spectrum, making them suitable for a wide range of formulations. These rheological additives do not require special activation and can be added at various stages of the production process.

The NiSAT technology can be used alone or in combination with other RHEOLATE® or BENTONE® products.

RHEOLATE® NiSAT benefits:

Broad range of RHEOLATE® NiSAT for different application techniques to achieve optimum application properties:

- Enhanced spatter resistance, hiding power and sag resistance
- Perfect levelling and adequate transfer to substrate
- Improved atomization/ creation of very fine droplets
- Uniform film thickness
- Suitable for systems with pH 2-12
- No negative impact on water resistance and corrosion resistance
- RHEOLATE® Powder NiSAT with 100% active content for improved sustainability
- RHEOLATE® BIO NiSAT with > 90% Bio-based carbon content certified

RHEOLATE® BIO NiSAT benefits	RHEOLATE® POWDER NISAT benefits
>90% bio-based carbon content	Powder form (100% active)
Low odor	Higher efficiency compared to liquid counterpart
High film builds with outstanding flow & leveling	Preservative-free
Compatible with all resin systems	Surfactant-free
Easy incorporation and use	No specific activation necessary
Good storage stability	Suitable for modular production process
	No risk of freezing
	Lower transport volumes – fuel savings



				(0				Shear Rat	е		Indust	ry		Availa	ability
Product Name	Chemistry	Description and key benefits	Suitable for VOC compliant systems	Volatile components	Typical use level %	Active %	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
NiSAT Rheology Mo	difiers - Waterborn	e													
RHEOLATE® PHX 7025	Polyurethane Powder	 Highly efficient high-shear-viscosity builder. Use for roller/ brush application resulting in exceptional application properties like spatter resistance, hiding power and material transfer. Powder version for sustainable formulations. 	•	None	0.1 - 0.6	100			• • •	•	•	•		•	•
RHEOLATE® HX 6025	Polyurethane Solution	 Highly efficient high-shear-viscosity builder. Use for roller/ brush application resulting in exceptional application properties like spatter resistance, hiding power and material transfer. Excellent stain resistance in deco paint systems. Supports stain resistance and anti-snail trail functionalities in deco paint systems. 	•	Water	0.3 - 3.0	21			• • •	•	•	•		•	•
RHEOLATE® HX 6010	Polyurethane Solution	 Highly efficient high-shear-viscosity builder. Use for roller/ brush application resulting in exceptional application properties like spatter resistance, hiding power and material transfer. In roller applied paints often used in combination with RHEOLATE® NiSAT grades like RHEOLATE® 666 or RHEOLATE® CVS-15 for ideal balance of properties. IF-version: isothiazolinone free. 	•	Water	0.3 - 3.0	21			• • •	•	•	•		•	•
RHEOLATE® 212	Polyurethane Solution	 High-shear-viscosity builder with little influence on mid-shear-viscosity. In roller applied paints often used in combination with NiSAT grades like RHEOLATE® 666, RHEOLATE® CVS-15 for ideal balance of properties. IF-version: isothiazolinone free. 	•	Water	0.4 - 3.0	20		•	• •	•	•	•		•	•
RHEOLATE® 222	Polyurethane Solution	 High-shear-viscosity builder with little influence on mid-shear-viscosity. In roller applied paints often used in combination with NiSAT grades like RHEOLATE® 666, RHEOLATE® CVS-15 for ideal balance of properties. 	•	Water	0.4 - 3.0	20		•	• •	•	•	•		•	•
RHEOLATE® BIO 5010	Polyurethane Solution, Bio-Based	 High-shear-viscosity builder with little influence on mid-shear-viscosity. In roller applied paints often used in combination with NiSAT grades like RHEOLATE® BIO 5075. 92% biobased carbon content and isothiazolinone free. 	•	Water	0.5 - 5.0	20		•	• •	•	•	•		•	•
RHEOLATE® 350 D	Polyether Polyol Solution	 High-shear-viscosity builder with impact on mid-shear-viscosity. Specifically for parquet coatings/ roller and brush application/ self-levelling. No negative impact on transparency. Due to specific chemistry the performance of the product is less impacted by other formulation components like surfactants. 	•	Water	0.5 - 5.0	50	٠	• •	• •	•	•	•		•	•
RHEOLATE® HX 6008	Polyurethane Solution	 Highly efficient high-shear-viscosity builder with significant mid-shear-viscosity contribution. Often as single thickener in use; especially for smaller particle size binder emulsions (acrylic, styrene-acrylic, AQ-alkyd, PU, etc). IF-version: isothiazolinone free. 	•	Water	0.1 - 1.5	25		• •	• • •	٠	•	•		•	٠
RHEOLATE® HX 6030	Polyurethane Solution	 Highly efficient high-shear-viscosity builder with significant mid-shear-viscosity contribution. Offers good storage stability and excellent color properties with reduced color float and good color rub-up Provides outstanding application properties for uniform film build, improved hiding and superior coverage Shows compatibility in all resin systems, especially in hydrophobic, acrylic and styrene acrylic resins 	•	Water	0.1 - 1.5	17,5		• •	• • •	•	•	•		•	•

^{• • •} highly recomended • • recommended • suitable

				ø				Shear Rate	•		Indust	ry		Avail	ability
Product Name	Chemistry	Description and key benefits	Suitable for VOC compliant systems	Volatile components	Typical use level %	Active %	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
NiSAT Rheology Mo	difiers - Waterborn	ne													
RHEOLATE® FX 1070	Polyurethane Solution	 Efficient high-shear-viscosity builder with significant mid-shear-viscosity contribution. Ideal also for systems with low NVC or resin-free pigment concentrates. 	•	Water	0.2 - 2.0	20	•	• •	• • •	•	•	•		•	•
RHEOLATE® 244	Polyurethane Solution	High-to medium-shear-viscosity builder.		Water/ butyl diglycol	0.4 - 3.0	25		• •	• • •	•	•	•		•	•
RHEOLATE® 644	Polyurethane Solution	VOC-reduced and isothiazolinone free version of RHEOLATE® 244.	•	Water	0.4 - 3.0	25		• •	• • •	•	•	•		•	•
RHEOLATE® 278 TF	Polyurethane Solution	Mid-/high-shear-viscosity builder.		Water/ butyl diglycol	0.4 - 2.0	25		• • •	• •	•	•	•		•	•
RHEOLATE® 678	Polyurethane Solution	VOC-reduced and isothiazolinone free version of RHEOLATE® 278 TF.	•	Water	0.4 - 2.0	25		• • •	• •	•	•	•		•	•
RHEOLATE® 208	Polyurethane Powder	Mid-/high-shear-viscosity builder.Often as single thickener in use.Powder version for sustainable formulations.	•	None	0.1 - 0.6	100		• • •	• •	•	•	•		•	•
RHEOLATE® CVS-10	Polyurethane Solution	 Good viscosity stability upon colorant addition and minimizes viscosity-drop post tinting. Excellent balance of sag resistance and flow. Broad compatibility with binder chemistries. 		Water	0.25 - 1.5	20		•	•	•	•			•	•
RHEOLATE® 310 D	Polyether Polyol Solution	 Excellent mid-shear viscosity builder. Less sensitive to higher HLB surfactants and to coalescents. Due to specific chemistry the performance of the product is less impacted by other formulation components like surfactants. 	•	Water	0.3 - 3.0	32		• •		•	•	•		•	•
RHEOLATE® HX 6050	Polyurethane Solution	 Highly efficient high-shear-viscosity builder for larger particle size binder systems with good mid-shear-viscosity contribution. Ideal especially for systems using larger particle sized binders (e.g. VAE, vinyl-ester). IF-version: isothiazolinone free. 	٠	Water	0.4 - 2.0	25		• •	• • •	•	•	•		•	•
RHEOLATE® 255	Polyurethane Solution	 Mid-shear-viscosity builder with slight impact on low-shear-viscosity. "Allrounder". 		Water/ butyl diglycol	0.2 - 2.0	20		• •		•	•	•		•	•
RHEOLATE® 655	Polyurethane Solution	VOC-reduced and isothiazolinone free version of RHEOLATE® 255.	•	Water	0.2 - 2.0	20		• •		•	•	•		•	•
RHEOLATE CVS® 11	Polyether polyurethane	 Good viscosity stability upon colorant addition and minimizes viscosity-drop post tinting. Good balance of sag resistance and flow. More Newtonian compared to Rheolate CVS 15. 		Water	0.5 - 1.5	15	•	• •	•	•	•			•	•
RHEOLATE CVS®-15	Polyurethane Solution	Special mid-shear-viscosity builder tinting systems providing reduced KU-drop upon tinting.	•	Water	0.25 - 1.5	50	• •	• •		•	•			•	•
RHEOLATE® 658	Polyurethane Solution	 Low-/mid-shear-viscosity builder, especially with small particle-size binders. Ideal for combination with high-shear-thickener and for roller/brush application. 	•	Water	0.2 - 1.0	17,5	• •	• •		•	•	•		•	•

^{• • •} highly recomended • • recommended • suitable

				v			,	Shear Rate			Indust	ry		Availa	ability
Product Name	Chemistry	Description and key benefits	Suitable for VOC compliant systems	Volatile component	Typical use level %	Active %	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA LA
NiSAT Rheology Mo	difiers - Waterborn	e													
RHEOLATE® BIO 5075	Polyurethane Solution, Bio-Based	 Mid-shear viscosity builder, especially with small particle-size binders. Ideal for combination with high-shear-thickener RHEOLATE® BIO 5010 and for roller/brush application. 90% biobased carbon content. 	•	Water	0.2 - 1.0	17,5	• •	• •		•	•	•		•	•
RHEOLATE® FX 1010	Polyurethane Solution	Low-shear-viscosity builder.Ideal also for systems with low NVC or resin-free pigment concentrates.		Water/ glycol	0.2 - 2.0	50	• •	•		•	•	•		•	•
RHEOLATE® FX 1100	Polyurethane Powder	Powder version of RHEOLATE® FX 1010 for sustainable formulations.	•	None	0.2 - 1.0	100	• •	•		•	•	•		•	•
RHEOLATE® 266	Polyurethane Solution	 Low-shear-viscosity builder for combination with high-shear-thickener. Specifically for roller/brush application. 		Water/ butyl diglycol	0.2 - 6.0	20	• •	•		•	•	•		•	•
RHEOLATE® 666	Polyurethane Solution	VOC-reduced and isothiazolinone free version of RHEOLATE® 266.	•	Water	0.4 - 2.0	20	• •	•		•	•	•		•	•
RHEOLATE® 288	Polyurethane Solution	Highly efficient low-shear-thickener that provides excellent sag resistance during spray application.		Water/ butyl diglycol	0.2 - 2.0	25	• • •			•	•	•		•	•
RHEOLATE® 299	Polyurethane Solution	 Most efficient low-shear-thickener providing strongest pseudoplastic flow behaviour, resulting in perfect atomization during industrial spray application. Also suitable for dip application where homogenious film-thickness is required. 		Water/ butyl diglycol	0.2 - 2.0	25	• • •			•	•	•		•	•

^{•••} highly recomended •• recommended • suitable

27



RHEOLATE® acrylic thickeners for aqueous systems

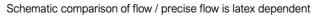
RHEOLATE® alkali swellable rheological additives are free-flowing liquids, based on vinyl copolymer chemistry and are known for their ability to swell and thicken when neutralized with alkali.

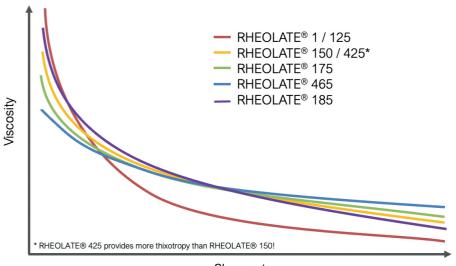
Each product enhances viscosity development, flow and application properties and can easily be post-added in the manufacturing process of various aqueous systems, including paints, coatings, adhesives, and construction materials.

RHEOLATE® ASE/HASE benefits:

Broad range of RHEOLATE® NiSAT for different application techniques to achieve optimum application properties:

- Easy to incorporate into different stages of production
- Resistant to microbiological and enzyme spoilage
- Long-term stability in the final product.
- Providing a balanced flow and sag properties
- Potential use as full or partial replacements for HEC and HMHEC





Shear rate

				Shear Rate			Indus	stry		Avail	lability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
ASE & HASE Rh	neology Modifiers - W	aterborne									
RHEOLATE® 1	Acrylic, ASE-type	 Low-shear-viscosity builder. Replacement for HEC with improved sag resistance and less settling. Specifically for low PVC systems. 	•			•	•	•	•	•	•
RHEOLATE® 125	Acrylic, ASE-type	Excellent low-shear-viscosity builder providing pseudoplastic flow properties resulting in perfect spray application.	•			•	•	•	•	•	•
RHEOLATE® 150	Acrylic, HASE-type	 Very good low-shear-viscosity builder. Cost-effective alternative to high-molecular-weight HEC with good sag/ levelling balance. 	•			•	•	•		•	•
RHEOLATE® 175	Acrylic, HASE-type	Excellent mid-to high-shear-viscosity builder providing excellent film build, leveling and spatter resistance.		•		•	•	•		•	•
RHEOLATE® 185	Acrylic, HASE-type	 Excellent low-shear-viscosity builder developed to replace HEC in interior and exterior paint formulations, giving improved applied hide and reduced spatter. Imparting shear-thinning flow for sag resistance and anti-settling. Reducing mud cracking of paints. 	•			•	۰	•		•	•
RHEOLATE® 425	Acrylic, HASE-type	 Excellent mid-shear-viscosity builder. Good balance of KU/ICI viscosities in paint formulations for sag resistance and anti-settling. Good allrounder with improvments in spattering resistance. 		•		•	•	•		•	•

• recommended

				Shear Rate			Inc	dustry		Ava	ilability
Product Name	Chemistry	Description and key benefits	Low	Medium	High	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
ASE & HASE Rheo	logy Modifiers - Wat	terborne									
RHEOLATE® 465	Acrylic, HASE-type	 HASE Thickener with unique flow and levelling properties. Works well across all decorative latex systems. Highly efficient in systems with small particle size emulsions. 		•	•	•	•	•		•	•
RHEOLATE® 101	Acrylic, ASE-type	 Very good low-shear ASE-type viscosity builder. Excellent spray application properties for industrial systems. 	•					•		•	•
RHEOLATE® 475	Acrylic, HASE-type	 Excellent mid-shear viscosity HASE-type builder. Provides the balance of properties not typically found in acrylic chemistries such as excellent flow and leveling. Highly efficient in systems with small particle size emulsions. 		•	•	•	•	•		•	•
RHEOLATE® RX 01	Acrylic, HASE-type	 Excellent mid-shear-viscosity builder providing excellent film build, leveling and spatter resistance. Acrylic associative thickener for water-based systems, compatible with the main types of emulsions, such as acrylics, styrene-acrylics, vinyl-acrylics, vinyl-maleates and VeoVa. 		•	•	•	٠	•			•
RHEOLATE® RX 430	Acrylic, HASE-type	 Excellent mid-to high-shear-viscosity builder providing excellent film build, leveling and spatter resistance. Acrylic associative thickener for water-based systems, compatible with the main types of emulsions, such as acrylics, styrene-acrylics, vinyl-acrylics, vinyl-maleates and VeoVa. 		•	•	•	•	•			•
RHEOLATE® RX 04	Acrylic, HASE-type	 Excellent mid-to high-shear-viscosity builder providing excellent film build, leveling and spatter resistance. Acrylic associative thickener for water-based systems, compatible with the main types of emulsions, such as acrylics, styrene-acrylics, vinyl-acrylics, vinyl-maleates and VeoVa. 		•	•	•	٠	•			•
RHEOLATE® SH 01	Acrylic, HASE-type	Pseudoplastic HASE with high thickening effect, used in waterbased formulations, with high PVC, mainly acrylics, styrene-acrylics and vinyl-acrylics textures and plasters.				•		•	•		•
RHEOLATE® SH 13	Acrylic, HASE-type	Pseudoplastic HASE with high thickening effect, used in waterbased formulations, with high PVC, mainly acrylics, styrene-acrylics and vinyl-acrylics textures and plasters.				•		•	•		•
RHEOLATE® WT 30H	Acrylic, HASE-type	Pseudoplastic HASE with high thickening effect, used in waterbased formulations, with high PVC, mainly acrylics, styrene-acrylics and vinyl-acrylics textures and plasters.				•		•	•		•

recommended



THIXATROL® organic thixotropes

THIXATROL® and THIXCIN® organic thixotrope rheological additives for non-aqueous systems are based on castor wax derivatives and polyamides.

They typically need appropriate wetting and a certain activation temperature window to achieve optimum performance.

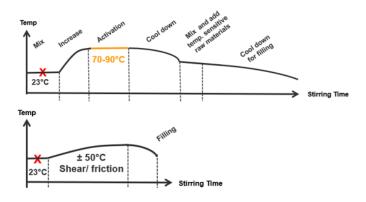
THIXATROL® benefits:

- Imparting thixotropy/ pseudoplastic flow characteristics
- Perfect rheology modifier for spray application and extrusion process
- Excellent sag resistance at extremely high film thickness
- Uniform film formation also at low film thickness

THIXATROL® AS and PM benefits:

- Higher efficiency compared to references and mineral based rheological additives
- Lower activation temperature (as of 40°C)
- Shorter process times allowing for time savings and leading to higher production capacity
- Wider temperature activation window resulting in more robust process
- Improved storage stability of final formulation
- Higher elasticity in final application compared to mineral based rheological additives

"Old" high temperature process vs. optimized process



Product	Renewable content (ISO 16128 calculated) in %	Renewable carbon content* in %
THIXATROL® AS 8053	69,7	78,3
THIXATROL® PM 8056	72,0	81,8
THIXATROL® PM 8058	74,8	82,5
THIXATROL® MAX	86,8	92,3

*%Renewable carbon calculates percentage of renewable carbon to total organic carbon, as per ASTM D6866, and can be validated via measurement of 14C content

X Addition of Diamide



				Syster	n			Indus	stry		Availa	bility
Product Name	Chemistry	Description and key benefits	% Polid %	Solventborne	Waterborne	Solventfree	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	ΓΑ
Organic Thixotropes	for Solventborne &	Solvent Free Formulations										
THIXATROL® AS 8024	Proprietary organic	Special grade for sag resistance at elevated temperatures occurring during application process.	100	•		•		•	•		•	•
THIXATROL® AS 8053	Proprietary organic	 Thixotropic agent for activation at low temperature (40-60°C). Suitable for solvent-free and solvent-containing formulations. Imparting strongly pseudoplastic flow characteristics resulting in slump/sag resistance and easy extrudability. Excellent atomization when used in spray applied coatings and good levelling even at very low wet-film-thickness. 	100	•		•		•	•		•	•
THIXATROL® PM 8056	Proprietary organic	 Thixotropic agent for activation at a wide tempoerature window (50-75°C). Suitable for solvent-containing and solvent-free formulations. Imparting strongly pseudoplastic flow characteristics resulting in high sag resistance and excellent sprayability. 	100	•		•		•	•		•	•
THIXATROL® PM 8058	Proprietary organic	 Thixotropic agent for activation at a wide temperature window (50-75°C). Suitable for solvent-containing formulations, specifically for high polar solvent composition including alcohols. Imparting strongly pseudoplastic flow characteristics resulting in high sag resistance and very good sprayability. 	100	•		•		•	•		•	•
THIXATROL® MAX	Proprietary organic	 Thixotropic agent for activation at high temperature (60-100°C depending on polarits). Suitable for solvent-free and solvent-containing formulations. Imparting strongly pseudoplastic flow characteristics resulting in slump/sag resistance and easy extrudability/ spray application. 	100	•		•		•	•		•	•
THIXATROL® PLUS	Proprietary organic	 Thixotropic agent for activation temperature (50-90°C depending on polarity). Suitable for solvent-containing and solvent-free top coats. Imparting strongly pseudoplastic flow characteristics resulting in high sag resistance and very good sprayability. 	100	•		•	•	•	•		•	•
THIXATROL® ST	Organic modified castor wax derivative	Thixotropic agent suitable for solvent-containing and solvent-free formulations, especially for low polarity aliphatic and aromatic systems.	100	•		•	•	•	•		•	•
THIXATROL® GST	Organic modified castor wax derivative	Thixotropic agent suitable for solvent-containing and solvent-free formulations, especially for low polarity aliphatic and aromatic systems. Easier to disperse compared to THIXATROL® ST.	100	•		•	•	•	•		•	•
THIXATROL® P200A	Polyamide paste	 Paste of thixotropic agent for solvent borne systems (in Aromatic 100). Ideal also for transparent systems and for post-addition. No temperature activation necessary. 	20	•			•	•			•	•
THIXATROL® P200N	Polyamide paste	 Paste of thixotropic agent for solvent borne systems (in Nafta). Ideal also for transparent systems and for post-addition. No temperature activation necessary. 	20	•			•	•			•	•
THIXATROL® P200X	Polyamide paste	 Paste of thixotropic agent for solvent borne systems (in Xylene). Ideal also for transparent systems and for post-addition. No temperature activation necessary. 	20	•				•			•	•
THIXATROL® P220X-MF	Polyamide paste	 Paste of thixotropic agent for solvent borne systems (in Xylene). Ideal also for transparent systems and for post-addition. No temperature activation necessary. 	20	•				•			•	•

recommended

				Syste	m			Indus	stry		Availa	ability
Product Name	Chemistry	Description and key benefits	% pilo %	Solventborne	Waterborne	Solventfree	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	ΓĄ
Organic Thixotropes for	or Solventborne & Solv	vent Free Formulations										
THIXATROL® SR	Polyester amide	 Non-seeding, highly efficient, liquid organic rheological additive. Ideal for aromatic and some oxygenated solvent-based systems. 	30	•				•			•	•
THIXATROL® TSR	Polyester amide	 Seed resistant, liquid organic rheological additive. Designed for use in aliphatic and aromatic solvent based system. 	35	•				•			•	•
THIXATROL® UV 1104	Polyester	Liquid, 100% NV, rheological additive for UV Coatings.	100	•		•		•			•	•
THIXCIN® R	Derivative of castor wax	Thixotropic agent suitable for solvent-containing and solvent-free formulations, especially for low polarity aliphatic systems.	100	•		•		•	•		•	•
Organic Thixotropes for	or Waterborne Formula	ations	<u>'</u>									
THIXATROL® 5020W	Proprietary organic	 For use in metallic water-borne coating systems. Modified EVA emulsion enhancing rheological efficiency and metallic pigment orientation. Prevents sedimentation of heavy pigments such as metallic flakes and pearlescent pigments during preparation, application and storage. Provides improved stability and appearance of metallic coatings. Suitable for a wide range of metallic waterborne paints. 	20		•			•			•	•
THIXATROL® 5050W	Proprietary organic	 For use in metallic water-borne coating systems. Modified EVA emulsion enhancing metallic pigment orientation. Prevents sedimentation of heavy pigments such as metallic flakes and pearlescent pigments during preparation, application, and storage. Less impact on viscosity and post thickening Easy formulation 	20		•			•			٠	•
THIXATROL® P2100W	Proprietary organic	 Special polyamide-based waterborne rheology modifier. Provides anti-sagging and anti-settling properties. Improves orientation of metallic pigments in waterborne coatings. Supplied as a polyamide solution in water/propylene glycol monomethyl ether. Suitable for enhancing stability and performance in waterborne coating systems. 	18		•			•			•	•

recommended



Anti-settling Agents

M-P-A® Anti-settling Agents

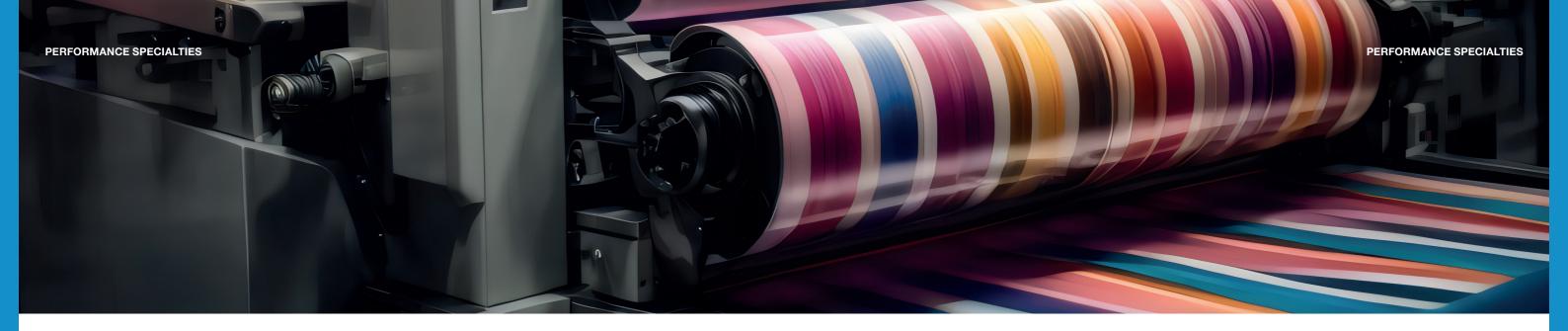
M-P-A® are ready-to-use anti-settling agents for waterborne and solventborne systems improve the storage stability of the final formulation while not having negative impact on the application viscosity.

				System			Inc	dustry		Availa	bility
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction N	A	LA
Anti-settling Age	nts - Solventborne										
M-P-A [®] 2000-X	Organic compound, low-viscous paste	 Anti-settling additive for solvent-borne systems in xylene. 20% NV / 0.8% moisture (H²O). Pourable liquid. 	•			•	•			•	•
M-P-A® MS	Organic compound, paste	Highly efficient organic anti-settling paste.	•			•	•			•	•
M-P-A [®] 60 A	Organic compound, paste	 Anti-settling additive for solvent-borne systems in isopropyl alcohol. 24% NV / Moisture-free. Paste. 	•				•			•	•
M-P-A [®] 60 MS	Organic compound, paste	 Anti-settling additive for solvent-borne systems in mineral spirits. 24% NV / Moisture-free. Paste. 	•				•			•	•
M-P-A [®] 60 X	Organic compound, paste	 Anti-settling additive for solvent-borne systems in xylene. 24% NV / Moisture-free. Paste. 	•				•			•	•
M-P-A® 14	Organic smectite derivative	Rheological additive with emphasized anti-settling properties.	•				•			•	•
M-P-A [®] 1075	Organic compound, paste	 Anti-settling additive for solvent-borne and waterborne systems in butanol. 45% NV. Paste. 	•				•			•	•
M-P-A [®] 1078 X	Organic compound, paste	 Anti-settling additive for solvent-borne systems in xylene. 40% NV / 1.5% moisture (H²O). Soft paste. 	•							•	•

recommended

				System			In	dustry		Avai	lability
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Anti-settling Agent	ts - Solventborne										
M-P-A® 4020 X	Organic compound, paste	 Anti-settling additive for solvent-borne systems in xylene. 20% NV / Moisture-free. Pourable liquid & soft paste. 	•				•			•	•
M-P-A® 4020 BA	Organic compound, paste	 Anti-settling additive for solvent-borne systems in n-butyl acetate / mixed esters. 20% NV / Moisture-free. Pourable liquid & soft paste. 	•				•			•	•
POST® 4	Complex Organic derivative of Castor Oil	 Rheological additive for organic systems based on non-polar solvents. POST® 4 is castor-based, designed for let-down addition to boost viscosity and sag resistance. Primarily for non-aqueous aliphatic coating systems. Can be post-added as a corrective agent for flow control and/or pigment suspension enhancement. 	•			•	•			•	•
Anti-Settling Agen	ts - Waterborne										
RHEOLATE® 2000	Olefinic Copolymer Suspension	Liquid anti-settling agent, e.g. for highly filled waterborne pigment preparations.		•		•	•			•	•
RHEOLATE® 2001	Polyolefine Wax Dispersion	Liquid anti-settling agent, e.g. for highly filled waterborne pigment preparations.		•		•	•			•	•
Special Rheologica	al Modifiers - Solventbo	rne									
DEURHEO 201P	Polyethylene Wax	 Anti-settling additive for solventborne systems. Supplied as a 10% active solution in xylene/isopropyl alcohol. Easy to handle and disperses rapidly. Provides effective suspension and storage stability of pigments and fillers. 	•				•				•
DEURHEO 556S	Ethylene-Vinyl Acetate Copolymer Dispersion	 Rheological additive for solventborne systems. Designed to optimize the orientation of effect metallic pigments. Enhances surface appearance and brilliance of coatings. Contributes to improved flow and leveling properties. 	•				•				•
DEURHEO 2810	Modified Polyurea	 Liquid rheology modifier for solventborne coatings. Does not require specific activation temperature during incorporation. Improves viscosity control, sag resistance, and application properties. Suitable for easy incorporation and flexible use across formulations. 	•				•				•

recommended



Wetting & Dispersing Agents

NUOSPERSE® wetting and dispersing agents

NUOSPERSE® wetting and dispersing agents provide good application performance for inorganic and organic fillers and pigments. They are widely compatible with aqueous, solvent-based and solvent -free coatings, construction, adhesives & sealants formulas. They are essential agents for achieving uniform dispersion of pigments and fillers and improved stability which directly impacts the quality and durability of the final product.

NUOSPERSE® wetting and dispersing agents benefits:

- Rapid pigment/ filler wetting
- Full colour and maximum tinting strength development
- Long-term stability (anti-settlement/ flocculation resistance)
- Increased mill output
- Good flow at high pigment/ filler loading
- Compatibility with a broad range of formulations
- Elimination of floating, flooding and rub-up
- Maximum colour acceptance of all bases

					Sys	tem			Indus	try		Availa	bility
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourants	Compatibilizer	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Dispersants for waterb	orne formulations												
NUOSPERSE® FX 504	Polyacrylic (ammonia- neutralized)	For hydrophilic pigments and extenders used in paints and coatings.	30		•			•	•	•	•	•	•
NUOSPERSE® FX 505	Polyacrylic (ammonia- neutralized)	For hydrophilic pigments and extenders used in paints and coatings.	50		•			•	•	•	•	•	•
NUOSPERSE® FX 605	Polyacrylic (NaOH- neutralized)	For hydrophilic pigments and extenders used in paints and coatings with increased solids content for VOC compliant systems.	45		•			•	•	•	•	•	•
NUOSPERSE® FX 365	Nonionic polymeric wetting and dispersing agent	 Rapid pigment wetting and good pigment stabilization. For all kind of pigments in waterborne coatings, inks and pigment preparations. 	90		•	•		•	•	•	•	•	•
NUOSPERSE® FX 600	Multi-functional polymer	 For use of organic and inorganic pigments in decorative coatings and colorants. Typically combined with a NUOSPERSE® FN 260 or NUOSPERSE® FX 365. 	25		•	•		•	•	•	٠	•	•
NUOSPERSE® FX 610	Multi-functional polymer	VOC free version of NUOSPERSE® FX 600.	25		•	•		•	•	•	•	•	•
NUOSPERSE® FX 631	Hydrophobic copolymer (NaOH-neutralized)	For inorganic pigments, hydrophobic, (NaOH-neutralized).	24-26		•			•	•	•	•	•	•

• recommended

					Sys	tem			Indus	try		Availa	ability
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourant	Compatibilizer	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Dispersants for waterbo	rne formulations												
NUOSPERSE® FX 665	Hydrophobic copolymer (ammonia-neutralized)	 For inorganic pigments, hydrophobic, (ammonia-neutralized). Improved water resistance. 	21-22.5		•			•	•	•	•	•	•
NUOSPERSE® FX 7500W	Polymeric	 Universal dispersant for all kind of pigments in resin-free pigment preparations. Excellent colour strength and stabilisation of carbon black pigments. 	40		•			•	•	•	•	•	•
NUOSPERSE® FX 7600W	Polymeric	 Universal dispersant for all kind of pigments. Good colour strength development and stabilisation of carbon black pigments. Preferrable for resin-containing pigment preparations. 	35		•			•	•	•	•	•	•
NUOSPERSE® W-30	Polymeric	For high concentrated, low-viscosity, waterborne pigment preparations.	100		•	•		•	•	•	•	•	•
NUOSPERSE® W-33	Polymeric	 For high performing industrial coatings and pigment preparations with high colour strength. Excellent performance in stabilizing organic pigments (avoiding flocculation issue). 	40		•	•		•	•	•	•	•	•
NUOSPERSE® W-39	Polymeric	 For high performing industrial coatings and pigment preparations with high colour strength. Excellent performance in stabilizing organic pigments (avoiding flocculation issue). 	25		•	•		٠	•	•	•	•	•
NUOSPERSE® W-22	Polymeric	Dispersing agent for waterborne systems, yellows, reds, carbon blacks, etc.	29		•	•		•	•	•	•	•	•
NUOSPERSE® W-28	Polymeric	Dispersing agent for waterborne systems, blues, greens, iron oxides and violets.	44		•	•		•	•	•	•	•	•
NUOSPERSE® XL 210	Anionic	Universal Dispersing Agent and Emulsifier.	> 85	•	•	•	•	•	•	•	•	•	•
NUOSPERSE® XL 220	Anionic	Universal Dispersing Agent and Emulsifier.	> 95	•	•	•	•	•	•	•	•	•	•
NUOSPERSE® XL 1/80	Anionic	Universal Dispersing Vehicle.	75	•		•	•	•	•	•	•	•	•
NUOSPERSE® FWC	Polyacrylic (Sodium- neutralized)	For hydrophilic pigments and extenders used in paints and coatings.	25		•			•	•	•	•		•
Wetting agents for water	rborne formulations												
NUOSPERSE® 2000	Hydrophilic humectant	Humectant for pigment preparations.Preventing drying-out during storage (nozzle-clogging).	71			•		•	•	•	•	•	•
NUOSPERSE® 2006	Anionic surfactant	Universal wetting agent and colour acceptance improver for water based and non-aqueous systems.	76		•	•	•	•	•	•	•	•	•
NUOSPERSE® 2008	Anionic surfactant	Universal pigment dispersant for carbon blacks and organic pigments for water based and non-aqueous systems.	100	•	•			•	•	•	•	•	•
NUOSPERSE® FA 115	Anionic surfactant	Improvement of incorporation of universal colorants into base paints.	50		•	•	•	•	•	•	•	•	•
NUOSPERSE® FA 182	Anionic surfactant	Wetting agent in combination with colorants to improve color development.	65		•	•	•	•	•	•	•	•	•
NUOSPERSE® FA 196	Phosphate ester	Pigment dispersant for carbon blacks and organic pigments.	91	•	•	•	•	•	•	•	•	•	•
NUOSPERSE® FN 211	Nonionic surfactant	 Wetting agent and compatibilizer for aqueous deco and industrial systems, hydrophobic. Suitable for silicate systems and extander (talc) slurries. 	100		•	•		•	•	•	•	•	•
NUOSPERSE® FN 260	Nonionic surfactant	Wetting agent for organic and inorganic pigments and fillers with low foam stabilization.	95		•	•		•	•	•	•	•	•

recommended

42

					Sy	/stem			Indus	stry		Availa	bility
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourant	Compatibilizer	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Dispersants for waterb	orne formulations												
NUOSPERSE® FN 265	Nonionic surfactant	 Wetting agent for pigments and fillers with low foam stabilization. Hydrophilic. For architectural and industrial applications. 	90		•	•	•	•	•	•	•	•	•
NUOSPERSE® FN 267	Nonionic surfactant	Wetting agent for pigments and fillers with low foam stabilization.Highly hydrophilic.	100		•			•	•	•	•	•	•
NUOSPERSE® FN 270	Nonionic surfactant	 Wetting agent for pigments and fillers with low foam stabilization. Hydrophilic. Specifically for architectural paint systems. 	100		•			•	•	•	•	•	•
Wetting and dispersing	g agents for solventborne	system		'	<u>'</u>	<u>'</u>	'						
NUOSPERSE® 2008	Anionic surfactant	Pigment dispersant for carbon blacks and organic pigments.Rapid pigment wetting.Compatibilizer.	100	•	•		•	•	•	•	•	•	•
NUOSPERSE® FA 196	Phosphate ester	 Pigment dispersant for carbon blacks and organic pigments and compatibilizer (improving compatibility between pigment preparations and base paints). Wetting agent for fillers/ extenders in solventfree formulations enabling for higher filler load while improving storage stability. 	100	•	•		•	•	•	•	•	•	•
NUOSPERSE® FA 601	Anionic surfactant	Effective for both organic and inorganic pigments.	50	•				•	•	•	•	•	•
NUOSPERSE® 9850	Polymeric	Universal dispersant for all kind of pigments, providing high colour strength and stabilisation pigments.	46	•		•		•	•	•	•	•	•
NUOSPERSE® FX 9086	Polymeric	 Provides stable pigment dispersions as far as stable formulations with extenders/ fillers in solventborne and solvent-free systems (in aromatic-free solvent). 	50	•				•	•	•	•	•	•
NUOSPERSE® 657-NA	Modified alkyd resin	 Wetting and dispersing agent for solventborne systems. Highly effective with a wide range of organic and inorganic pigments. Recommended for high-performance solvent-borne coatings. Also suitable for vinyl applications. 	72,5	•		•		•	•	•	•	•	•
NUOSPERSE® 700	Anionic wetting agent	 Wetting and dispersing agent for solventborne systems. Works with Inorganic and organic pigments. Improves gloss, opacity and color strength. 	50			•	•	•	•	•	•	•	•
NUOSPERSE® FA 620	Anionic surfactant	 Wetting and dispersing agent for the manufacture of highly concentrated. Low viscosity aqueous pigment dispersions. 	50		•	•		•	•	•	•	•	•
DISPONER® 9250	Solution of a copolymer with acidic groups	Wetting and Dispersing Agent for solventborne systems.	50	•				•	•				•
DISPONER® 912	Solution of a salt of polyamide and polyester, electro neutral	Wetting and Dispersing Agent for solventborne systems.	50	•				•	•				•

recommended

					Sy	stem			Indus	try		Availa	bility
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourant	Compatibilizer	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Wetting and dispersing	agents for solventborne	system											
DISPONER® 904S	Solution of polycarboxylic acid polymer with modified polysiloxane	Wetting and Dispersing Agent for solventborne systems.	50	•					•				•
DISPONER® 983	High molecular weight polymer	Wetting and Dispersing Agent for solventborne systems.	53,5	•					•				•
DISPONER® 9850	Modified polyurethane	Wetting and Dispersing Agent for solventborne systems.	45,5	•					•				•

recommended



Defoamers and Specialties

DAPRO® Defoamers

DAPRO® defoamers are based on a variety of active materials to provide air release and bubble-breaking for most applications as paints, coatings, inks, adhesives & sealants and construction products. They help prevent and eliminate foam formation, which can cause defects and reduce the efficiency of production processes.

DAPRO® defoamers benefits:

- Excellent antifoaming and defoaming properties
- Easy to use and incorporate
- Good compatibility
- Very good long-term efficiency

SLIP-AYD®

SLIP-AYD® surface conditioners can improve a number of properties of coatings and inks including resistance to metal marking, fingernail scuffing and blocking. Surface conditioners are based on low molecular weight polyethylene and other synthetic and natural waxes. Low-level additions of the right surface conditioner can lower coefficient of friction and/or increase apparent film hardness.

NALZIN® Flash rush inhibitors

NALZIN® flash rust inhibitor support the reduction of flash-rust formation and minimize in-can corrosion.

HYPOMER Matting resins for solvent-borne systems

HYPOMER matting resins are essential ingredients in the formulation of solvent-borne coatings, providing a matte finish and enhancing the aesthetic and functional properties of the final product. This is achieved by introducing micro-roughness on the surface of the coating, which scatters light and reduces its reflectivity.

				System			Ind	lustry		Avail	lability
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Defoamers - Wate	rborne										
DAPRO® BIO 9910	Blend of hydrophobic silica & silicone in vegetal oil	Mineral Oil free standard defoamer for deco paints.96% biobased carbon content defoamer.		•		•				•	•
DAPRO® DF 108	Blend of hydrophobic silica & silicone in mineral oil	 VOC Free defoamer for decorative paints & coatings. Imparts excellent foam control in paints providing rapid bubble break at low concentrations. 		•		•				•	•
DAPRO® DF 1161	Modified silicone and polyol dispersion in water	 Highly effective defoaming during pigment dispersion and manufacturing processes. Provides long-lasting foam control in waterborne wood finishes. Ensures persistent defoaming performance in general industrial coatings. Maintains effective foam suppression during application. 		•		•	•	•		•	•

recommended

				System			In	dustry		Avai	lability
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Defoamers - Wate	rborne										
DAPRO® DF 1492	Modified polyol in water	 Silicone-free foam suppressor for solvent-borne systems. Effectively reduces or eliminates existing foam prior to filling. Functions as a press-side defoamer in flexographic and gravure printing applications. Provides immediate, short-term defoaming effect. 		•		•	•	•		•	•
DAPRO® DF 17	Blend of hydrophobic silica & silicone in mineral oil	 General-purpose let-down defoamer for decorative coatings. VOC-free formulation. Provides effective foam suppression during application. Suitable for a wide range of decorative coating systems. 		•		•	•	•		•	•
DAPRO® DF 1760	Modified polyol in water	Highly effective, silicone free, long lasting bubble breaker.		•		•	•	•		•	•
DAPRO® DF 19	Blend of hydrophobic silica in mineral oil	VOC-free, silicone free let down defoamer for semi-gloss and gloss coatings.		•		•	•	•		•	•
DAPRO® DF 21	Blend of hydrophobic silica, emulsifiers in mineral oil	 VOC-free, water-dispersible defoamer. Provides excellent application properties across a variety of resins and coatings. Particularly effective in high-gloss paints. Ensures efficient foam suppression with easy dispersion. 		•		•	•	•		•	•
DAPRO® DF 300	Blend of metallic salt, silica, emulsifiers in petroleum oil	Silicone—free defoamer for industrial waterborne acrylic coatings		•		•	•	•		•	•
DAPRO® DF 303	Blend of esters, emulsifiers in petroleum oil	 Effective defoamer in waterborne inks, adhesives and industrial coatings. Particularly useful for low sheen paints and coatings. 		•		•	•	•		•	•
DAPRO® DF 31	Blend of hydrophobic silica, emulsifiers in mineral oil	 VOC-free, water dispersible defoamer. Excellent application properties. Effective in high-quality waterborne inks, adhesives, and industrial coatings. Particularly useful for low sheen paints and coatings. Provides excellent foam suppression and defoaming performance. Readily dispersible in water. 		•		•	•	•		•	•
DAPRO® DF 3163	Modified polyol in water	 Highly effective silicone-free foam suppressor. Prevents foam formation in water-based coating systems. Specially recommended against microfoam in applied coatings. 		•		•	•	•		•	•
DAPRO® DF 38	Blend of hydrophobic silica and other foam breaking agents in mineral oil	 Excellent foam control in paints and coatings. Particularly effective across a wide range of binder systems. Provides rapid bubble break at low concentrations. Suitable for acrylic and vinyl-acrylic tint bases. Effective in flat to satin finishes. 		•		•	•	•		•	•
DAPRO® DF 39	Blend of hydrophobic silica in mineral oil	 VOC-free grind and let down defoamer for decorative paints and coatings. Work horse defoamer in most paint systems. 		•		•	•	•		•	•
DAPRO® DF 40	Blend of esters, polyglycols, silicones and organo-metallic salt in petroleum oil	100% active defoamer.Provides excellent foam control in aqueous foaming media.		•		•	•	•		•	•
DAPRO® DF 404	Blend of polypropylene glycol ethers	Defoamer for industrial coatings, can be used for many types of applications including roller coating, spraying, dipping and flow coating.		•		•	•	•		•	•
DAPRO® DF 4164	Fatty acid salt dispersion in mineral oil	 Easy to incorporate silicone-free defoamer. Ideal for waterborne architectural, industrial paints and flexographic & gravure inks. 		•		•	•	•		•	•

recommended

50

				System			Inc	dustry	Avai	lability
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction NA	LA
Defoamers - Wate	erborne									
DAPRO® DF 420	Blend of hydrophobic silica, esters and emulsifiers	Effective in adhesives and ink systems.Contributes to smooth films because of its excellent persistence.		•		•	•	•	•	•
DAPRO® DF 451	Blend of glycols and modified polysiloxanes in mineral oil.	Higly effective defoamer with superior surface compatibility for use in zero and low VOC flat to semi-gloss deco/waterborne coatings.		•		•	•	•	•	•
DAPRO® DF 47	Blend of hydrophobic silica in mineral oil	General purpose let down defoamer for decorative coatings.		•		•	•	•	•	•
DAPRO® DF 503	Blend of metallic salt, polymeric derivatives and emulsifiers in mineral oil	 Silicone-free dispersible defoamer. Exhibits fast knock down. Suitable for a variety of coating and printing ink applications. 		•		•	•	•	•	•
DAPRO® DF 51	Blend of esters, hydrophobic silica and emulsifiers	 Mineral oil-free defoamer. Designed for gloss-sensitive waterborne systems. Particularly useful in high gloss systems, flexo inks, and paper coatings. 		•		•	•	•	•	•
DAPRO® DF 52	Blend of esters, hydrophobic silica and emulsifiers	 Mineral oil-free defoamer. Designed for gloss-sensitive waterborne systems. Specially useful in high gloss systems, flexo-inks and paper coatings. 		•		•	•	•	•	•
DAPRO® DF 603	Blend of cyclohexanone and a proprietary modified silicone	Defoamer and deaerator for solvent based coating systems.	•			•	•	•	•	•
DAPRO® DF 605	Silicone emulsion	Silicone grind defoamer for water borne elastomeric coatings and mastics.		•		•	•	•	•	•
DAPRO® DF 615	Silicone emulsion	Silicone grind defoamer for water borne coatings.		•		•	•	•	•	•
DAPRO® DF 620	Silicone blend	Concentrated defoamer, 100% active.Suitable for industrial water or solvent foaming media.	•	•		•	•	•	•	•
DAPRO® DF 646	Emulsion of glycols and modified polysiloxanes	 Highly efficient, easily incorporated defoamer. Minimal impact on gloss. Suitable for waterborne industrial, architectural, and wood coatings. Effective in inks. 		•		•	•	•	•	•
DAPRO® DF 661	Blend of glycols and modified polysiloxanes	Effective defoamer for waterborne industrial coatings.		•		•	•	•	•	•
DAPRO® DF 675	Blend of glycols and modified polysiloxanes	 Effective grind and let down defoamer for high quality decorative and water-borne industrial coatings. Suitable for semi-gloss and high gloss paints. 		•		•	•	•	•	•
DAPRO® DF 7005	Blend of hydrophobic silica in mineral oil	Standard silicone free defoamer for deco paints.		•		•	•	•	•	•
DAPRO® DF 7010	Blend of hydrophobic silica and silicone in mineral oil	Standard defoamer for deco paints.		•		•	•	•	•	•
DAPRO® DF 80	Blend of hydrophobic silica, emulsifiers in mineral oil	 Effective defoamer in aqueous media. Particularly suitable for coatings.		•		•	•	•	•	•
DAPRO® DF 900	Dispersion of olefinic solids	Silicone-Free and Oil-Free defoamer. Particularly suitable for coatings and inks.		•		•	•	•	•	•
DAPRO® DF 975	Dispersion of olefinic solids	 Silicone-Free and Oil-Free defoamer. Particularly suitable for coatings and inks. FDA compliant coatings. 		•		•	•	•	•	•
DAPRO® DF 99	Blend of esters, glycol, organo metallic salt in mineral oil	 VOC-free, water dispersible defoamer. Excellent application properties. Particularly effective in flexo, gravure, and screen printing inks. Suitable for adhesives and water-based industrial coatings. Exhibits fast knockdown even at low use levels. 		•		•	•	•	•	•

recommended

52

				System			Inc	Avai	lability		
Product Name	Chemistry	Description and key benefits	Solventborne	Waterborne	Colourant	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Defoamers - Solver	ntborne										
DAPRO® DF 5300	Modified Polysiloxane	Defoamer for solventborne 2K PU, Epoxy, Alkyd Enamels.Guarantees less impact on gloss and turbidity.	•				•			•	•
DAPRO® DF 5800F	Modified Polysiloxane	 Defoamer for solventborne 2K Epoxy and Acrylic Enamels. Aromatic Free version of DAPRO DF 5300. 	•				•			•	•
DAPRO® DF 6800	Modified Polysiloxane with Hydrophobic particles	Solvent-free defoamer for high solids Epoxy coatings and thick films.	•				•			•	•
DAPRO® NA 1622	Silicone solution in Hydrocarbon Solvent	Standard defoamer, silicone modified, for solventborne inks and coatings	•				•			•	•
DEFOM 2700	Polymer solution	Standard silicone free defoamer for solventborne inks and coatings.	•			•	•				•
DEFOM 6500	Modified Polysiloxane	Standard defoamer, silicone modified, for solventborne inks and coatings	•			•	•				•
DEFOM 5300	Modified Polysiloxane	Defoamer for solventborne 2K PU, Epoxy, Alkyd Enamels.Guarantees less impact on gloss and turbidity.	•				•				•
DEFOM 5800F	Modified Polysiloxane	 Defoamer for solventborne 2K Epoxy and Acrylic Enamels. Aromatic Free version of DAPRO® DF 5300. 	•				•				•
DEFOM 6800	Modified Polysiloxane with Hydrophobic particles	Solvent-free defoamer for high solids Epoxy coatings and thick films	•				•				•
Defoamers - Powde	er										
DAPRO® PD 801 W	Blend of liquid defoamer on an inert carrier	Outstanding defoamer for removing entrained air.Suitable for general powder applications.		•					•	•	•
DAPRO® PD 829	Blend of liquid defoamer on an inert carrier	 Outstanding defoamer for removing entrained air in powder applications. Ideal for drywall joint compounds & cement mixes. Good performance with Vinyl, Acrylic and Protein based binders. 		•					•	•	•

recommended

					System			Industry			Availability	
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourants	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA
Substrate Wetting) Agents											
DAPRO® U-99	Proprietary Anionic / Nonionic Surfactants	 Interfacial tension modifier, FDA approved. Effective at relatively low use levels. Eliminates or diminishes film defects. Particularly effective in solvent-based two-component epoxy systems, as well as waterborne and solvent-based alkyd systems and decorative coatings. 	50	•	•		•	•	•		•	•
DAPRO® W-77	Proprietary Anionic / Nonionic Surfactants	 Interfacial tension modifier, FDA approved. Acts as an intermediate between areas of high and low surface tension. Works within a coating or between the coating and the substrate. Eliminates or diminishes film defects such as crawling, fish eyes, and some forms of cratering. 	50		•		•	•	•		•	•
DAPRO® W-95HS	Proprietary Anionic / Nonionic Surfactants	High solids compound for elimination of surface defects.Suitable for aqueous coatings.	77,5		•		•	•	•		•	•
SUPREAD® 3410	Muti-function branch modified silicone blend	 Specially designed with branch structure and controlled hydrophilic portion. Reduces surface tension and controls liquid-gas and liquid-solid adsorption tendencies. Exhibits excellent surface tension reduction and strong surface activity. Enhances substrate wetting ability and prevents cratering. Offers controllable low foaming performance. Suitable for water-based coatings, including wood, plastic, and other industrial coatings. 	> 90		•		•	•	٠		•	•

recommended

recommended

					System			Industry			Availability		
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourants	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA	
Slip, Mar & Levellir	ng Agents												
SLYP-AYD® FS 444	Polysiloxane	 Increases surface slip of water-borne and polar solvent-borne coatings. Enhances mar resistance for improved surface durability. Provides medium reduction of surface tension. Suitable for formulations requiring balanced surface performance. 	50	•				•			•	•	
LEVASLIP 432	Modified Polysiloxane	 Silicone-based leveling additive for solventborne systems. Provides slip, substrate wetting, and enhanced leveling. Improves orientation of matting silica for uniform appearance. Supplied in xylene, ethylene glycol monobutyl ether, and toluene; causes low surface tension reduction. 	13,5	•				•				•	
LEVASLIP 876	Modified Polysiloxane	 Silicone-based leveling additive with excellent compatibility. Provides strong substrate wetting, slip, and anti-cratering performance. Delivers excellent leveling for wood and general industrial coatings. Causes high reduction of surface tension. 	13	•				٠				•	
LEVELOL 495	Polymeric. Silicone Free	 Non-silicone flow and leveling additive for solventborne systems. Reduces craters, pinholes, and surface defects. Improves smoothness and uniform film appearance. Suitable where silicone-free formulations are required. 	50	•				•				•	
LEVELOL 835	Polymeric. Silicone Free	 Non-silicone leveling additive for solventborne systems. Improves flow and leveling with high formulation compatibility. Enhances intercoat adhesion. Provides smooth finishes without surface defects. 	50,5	•				•				•	
LEVELOL 837	Fluorocarbon Modified Polyacrylate	 Aromatic-free flow and leveling additive for solventborne coatings. Fluorocarbon-modified polyacrylate technology. Reduces surface tension, ensuring good substrate wetting. Prevents craters, pinholes, and fisheye defects. 	70,5	•				•				•	
LEVELOL 839	Fluorocarbon Modified Polyacrylate	 Fluorocarbon-modified polyacrylate leveling additive for solventborne systems. Provides excellent substrate wetting and flow improvement. Offers high compatibility and good intercoat adhesion. Ensures uniform film appearance with enhanced leveling. 	50	•				•				•	

recommended

		Description and key benefits	System					Industry				
Product Name	Chemistry		Active %	Solventborne	Waterborne	Colourants	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	ΓA
Waxes												
SLYP-AYD® SL 177	High Melt Polyethylene	 High melt polyethylene wax dispersion for industrial and coil coatings and wood finishes. Solvent: Xylene. 	77	•				•			•	•
SLYP-AYD® SL 18	Polyethylene	Polyethylene wax dispersion for industrial coatings.Solvent: 2-Butoxyethanol.	21	•	•			•			•	•
SLYP-AYD® SL 295A	High Melt Polyethylene	High melt polyethylene wax dispersion for industrial coatings and inks.Solvents: 42.0% Butoxy-Ethanol, 37.0% Water.	21		•			•			•	•
SLYP-AYD® SL 300	High Melt Polyethylene	 High melt polyethylene wax dispersion for industrial coatings and inks. Solvents: 10.0% Propylene Glycol, 59.0% Water, 1% Surfactants. 	30		•			•			•	•
SLYP-AYD® SL 31	Polyethylene	Polyethylene wax dispersion for industrial coatings.Solvent: Xylene.	18	•				•			•	•
SLYP-AYD® SL 404	Hard Polymeric Wax (Fischer Tropsch)	 Fine particle size dispersion of hard polymeric wax in 2-Butoxyethanol. Suitable for general industrial coatings, can coatings, wood finishes, plastic coatings, and auto OEM & refinish. Provides block and slip resistance. 	18	•				•			•	•
SLYP-AYD® SL 417	Hard Synthetic Aliphatic Wax	Fine particle size dispersion of a hard synthetic aliphatic wax prepared in isopropyl alcohol.	20	•	•			•			•	•
SLYP-AYD® SL 425	Hard Polymeric Wax (Fischer Tropsch)	 Fine particle size dispersion of hard polymeric wax in Xylene. Suitable for general industrial coatings, can coatings, wood finishes, plastic coatings, and auto OEM & refinish. Provides block and slip resistance. 	20	٠				•			•	•
SLYP-AYD® SL 50	Polyethylene	Polyethylene wax dispersion for industrial coatings.Solvent: Xylene.	22,5	•				•			•	•
SLYP-AYD® SL 506	Carnauba	 Fine particle size dispersion of carnauba wax in Dipropylene glycol methyl ether solvent. Provides low coefficient of friction and excellent product release. 	18,5	•	•			•			•	•
SLYP-AYD® SL 508	Carnauba	 Fine particle size dispersion of carnauba wax in Isopropanol solvent. Provides low coefficient of friction and excellent product release. 	17,5	•	•			•			•	•
SLYP-AYD® SL 523	Hard Polymeric Wax (Fischer Tropsch)	 Fine particle size dispersion of hard polymeric wax in Isopropanol. Suitable for general industrial coatings, can coatings, wood finishes, plastic coatings, and auto OEM & refinish. Provides block and slip resistance. 	18	•	•			•			•	•
SLYP-AYD® SL 530	Polyethylene	Polyethylene wax dispersion for industrial coatings.Solvent: 2-Butoxyethanol.	18	•	•			•			•	•
SLYP-AYD® SL 600	Micronized Polyolefin Blend	 Specialty wax blend providing excellent slip, abrasion, and block resistance. Suitable for all types of solvent and water-based coatings and inks. 	100	•	•			•			•	•
SLYP-AYD® SL 78	Polyethylene	Polyethylene wax dispersion for wood furniture and floor coatings.Solvent: Xylene.	22	•				•			•	•
SLYP-AYD® SL 551	High Melt Polyethylene	 High melt polyethylene wax dispersion for industrial coatings and inks. Solvents: 61.5% Aromatic100, 20.0% n-Butanol. 	18,5	•				•			•	•

• recommended

					System			Industry			Availabili	
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourants	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	ΓĄ
Adhesion Promoters												
DAPRO® ACP-16 W	Chlorinated polyolefin modified acrylic emulsion	Waterborne Adhesion Promoter, which is designed for improving adhesion of waterborne coatings and inks on polypropylene (PP) substrates.	30		•			•			•	•
ADHERANT ADP	Non-silicone polymeric compound	Solventborne Adhesion Promoter to improve adhesion of paint film especially on non ferrous substrates. It is mainly used in stoving paints.	80	•				•				•
ADHERANT APW	Non-silicone polymeric solution	Solventborne Adhesion Promoter to improve adhesion of metal pigment particles on the to surface of the final paint film.	60	•				•				•
Humectants - Waterk	oorne											
NUOSPERSE® 2000	Hydrophilic Humectant	 Dispersing agent and humectant for VOC-free universal pigment preparations. Prevents drying-out during storage, avoiding nozzle-clogging. 	73		•	•	•				•	•
NUOSPERSE® 3200	Hydrophobic Humectant	VOC-free hydrophobic humectant for use in waterborne, VOC-compliant colorants and pigment dispersions.	65		•	•	•				•	•
Corrosion Inhibitors	- Waterborne											
NALZIN® FA 579	Nitrite-Free Organic Zinc Complex	 Flash-rust and in-can corrosion inhibitor for water-based systems. Emulsified in water, NALZIN® FA 579 also acts as a temporary rust inhibitor. 	100		•			•			•	•
NALZIN® FA 179	Organic Zinc Complex	Flash-Rust and In-Can Corrosion Inhibitor for Water Based Systems.	100		•		•	•			•	•
Coalescing Agents -	Waterborne											
DAPRO® FX 511	Organic ester	Low-smelling coalescing agent for waterborne emulsion paints.	100		•		•	•	•		•	•
DAPRO® FX 513	Organic ester	Coalescing agent for VOC compliant systems.	100		•		•	•	•		•	•
DAPRO® FX 514	Renewable organic ester	Coalescing agent for VOC-compliant systems. Biobased product.	100		•		•	•	•		•	•

[•] recommended

				System			Industry				Availability		
Product Name	Chemistry	Description and key benefits	Active %	Solventborne	Waterborne	Colourants	Architectural Coatings	Industrial Coatings	Adhesives & Sealants	Construction	NA	LA	
Special Additives - Sc	olventborne												
DAPRO® BEZ 75	Sulphonated castor wax	Anti-settling agent, especially for aromatic-free systems.Efficient polar activator for organoclays.	77,5	•			•	•			•	•	
HYPOMER® MT-2550K	Acrylic resin with hydroxyl functionality	 Cross-linkable matting resin providing low gloss levels with uniform matting effect while showing high transparency and high D.O.I. Less layer thickness depending matting effect. Mar and scrub resistance significantly better than conventional matting agents. No negative impact on chemical resistance. 	49	•			•	•			•	•	
DAPRO® FA-NCO-6	Matte silica in Oil Modified Urethane	Pre-dispersed Flatting Base.Suitable for low to medium polarity organic systems.	45	•			•	•			•	•	
DAPRO® FK 321	Quaternary ammonium compound	 Resistance-reducing agent. Effective auxiliary for reducing the resistance of paints sprayed electrostatically. 	75	•				•			•	•	
DAPRO® 7054	Zinc complex in organic solvent	 Auxiliary additive accelerating the isocyanate-hydroxyl reaction in 2K polyurethane coatings and urethane foams. Accelerates the oxidation reaction in oil-based coating systems. Acts as a catalyst in alkyd paints and lacquers. Functions as a corrosion inhibitor in oils, resins, and hydrocarbons. 	17	•				•			•	•	
Special Additives - Sc	olventborne												
DUMACIL® 100 FGK	Hydrophobic silica	Micro-fine silica treated with an organic silicone compound for defoamer formulation	100	•	•		•	•			•	•	
DUMACIL® 300 FGK	Hydrophobic silica	Micro-fine silica treated with an organic silicone compound for defoamer formulation	100	•	•		•	•			•	•	
DUMACIL® 402 FGK	Hydrophobic silica	Micro-fine silica treated with an organic silicone compound for defoamer formulation	100	•	•		•	•			•	•	

recommended



For more details **ELEMENTIS** We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine **North America** if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document. 469 Old Trenton Road East Windsor © Copyright 2024, Elementis Specialties, Inc.
All rights reserved. Copying and/or downloading of this document or information therein for republication is not allowed unless prior written agreement is obtained from Elementis Specialties, Inc. **Europe** Porto Business Plaza Santos Pousada Street, 290 99, Lianyang Road Songjiang Industrial Zone Shanghai, China 201613 www.elementis.com 100 Unique chemistry, sustainable solutions