

Adhesives and sealants



	Defoamer	Substrate wetting	Rheology		viscosity	wetting and dispersing	
			thixotropic	anti-sagging			
Polyurethane	245S P-555	493U 495U	P-405		P-141 P-134	P-120 P-144	
Epoxy	P-570 P-555 P-571	493U 495U	P-405		P-134 P-185	P-120 P-144	P-160
Acrylic		493U 495U	P-405		P-141	P-120 P-144	P-160
Water based	280W 290W 295W	488U 487U			Inorganic P-130 / LP8730		
					Organic & Black P-135		
UV systems	P-555 245S	495U 477U			P-130	P-191	LP8730
					Organic & Black P-134/P-133		P-185 P-135

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Additives for Ambient Curing, Composites and PVC plastisols.



Air release

PRODUCTS	UPR	PUR	Epoxy	PVC	Features
UNIQ [®] FOAM P-509	•		•	•	Strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems. Especially suitable for unsaturated polyesters and epoxy based systems.
UNIQ [®] FOAM P-540	•		•		Silicone-free anti-foam and air-release agent and furthermore helps to improve the leveling and avoids pinholing or popping and improves viber wetting. It's suitable for unsaturated polyester systems, gel coats and cast resins. It is also recommended for pultrusion applications with acrylic, unsaturated polyester and vinyl ester resins.
UNIQ [®] FOAM P-555	•	•	•	•	Silicone free strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems, adhesives and sealants. Especially suitable for unsaturated polyesters.
UNIQ [®] FOAM P-570		•	•		Silicone containing strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems, adhesives and sealants and coating industry. Especially suitable for epoxy based systems
UNIQ [®] FOAM P-571	•	•	•	•	Silicone free strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems, adhesives and sealants and coating industry. Especially suitable for epoxy based systems, odour free and silicone free version of P-570.
UNIQ [®] FOAM P-575		•	•		Strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems, adhesives and sealants and coating industry, especially for epoxy and PU based resin systems. The additive furthermore helps to improve the leveling and avoids pinholing or popping.
UNIQ [®] FOAM P-595	•			•	Strong anti-foam and air-release agent especially suitable for ambient-curing plastic systems. Especially suitable for unsaturated polyesters and epoxy based systems.
UNIQ [®] FOAM 245S		•	•		Recommended for roller, brush and conventional spray application, very suitable also for systems ranging from low polar to high polar with strong working in against micro-foam. The defoamer is highly effective for solvent based and solvent free coating systems
UNIQ [®] FOAM 152 S		•			Strong defoamer, silicone free, can be used for all solvent borne coating systems, especially suitable for solvent free epoxy and solvent free UV system. The additive has an immediate foam-destroying effect with very strong deaeration and does not have influence on the intercoat adhesion.

Leveling/Substrate wetting

PRODUCTS	ACTIVE %	UPR	PUR	Epoxy	PVC	Features
UNIQ [®] FLOW P-304	100	•	•	•	•	Acrylic leveling agent for solvent based and solvent free systems. It's very suitable for gel coats that are base on unsaturated polyesters, epoxides and polyurethanes. The product shows excellent defocaming and leveling performances.
UNIQ [®] FLOW 415 S	15	•	•			Highly effective silicone additive, provides a strong reduction of surface tension. Offers good wetting of critical substrates. In pigmented systems it can prevent the formation of Bénard cells and improve leveling.
UNIQ [®] FLOW 361 S	100	•	•	•	•	Silicone free and can offer strong reduction of surface tension, improves wetting effect and has strong anti-crater performances. Meanwhile, it shows the good performance of fast wetting and leveling on difficult corners to achieve good film build up.
UNIQ [®] FLOW 495 U	100	•	•	•		Modified polyether polysiloxane leveling agents. The additive gives strong surface tension reduction properties in coatings. The substrate wetting is improved and therefore can also act as an anti-crater agent. Minimized foam stabilization
UNIQ [®] FLOW 386 S	50			•	•	Acrylic leveling agent for solvent based coating systems showing excellent compatibility and good leveling performances.
UNIQ [®] FLOW 375 S	70			•		Modified acrylic leveling agent to be used in solvent based coating systems showing some defoaming performances.

Wetting and Dispering Additives

PRODUCTS	ACTIVE %	UPR	PUR	Epoxy	PVC	Features
UNIQ [®] SPERSE P-114	50	•		•		Wetting and dispersing additive for filled unsaturated polyester, epoxy systems eg calcium carbonate and ATH. Strong viscosities reduction.
UNIQ [®] SPERSE P-120	100	•	•	•	•	Wetting and dispersing agent to reduce viscosity and prevents fillers from settling in ambient curing resins and adhesives as well for polyester molding compounds and pvc plastisols.
UNIQ [®] SPERSE P-130	100	•		•		Excellent suited for Solvent free epoxy for strong viscosity reduction of the filler paste improving viscosity and leveling.
UNIQ [®] SPERSE P-133	100			•	•	Solvent-free wetting and dispersing additive, very suitable for solvent-borne and solvent-free adhesives, PVC plastisol, ambient curing resin systems, and for the production of color master batches for thermoplastics. Particularly recommended for basic carbon black pigments.
UNIQ [®] SPERSE P-134	100			•	•	Solvent-free wetting and dispersing additive, very suitable for solvent-borne and solvent-free adhesives, PVC plastisol, ambient curing resin systems, and for the production of liquid color master batches for thermoplastics. Particularly recommended for acidic carbon black pigments. Excellent anti-separation additive for UPR and thermoplastic resins and improves the fiber wetting in SMC/BMC formulations.
UNIQ [®] SPERSE P-135	100		•	•	•	Solvent-free wetting and dispersing additive, very suitable for solvent-borne and solvent-free adhesives, PVC plastisol, ambient curing resin systems, and for the production of liquid color master batches for thermoplastics.
UNIQ [®] SPERSE P-137	100		•	•	•	Solvent-free wetting and dispersing additive, very suitable for solvent-borne and solvent-free adhesives, PVC plastisol, ambient curing resin systems, and for the production of liquid color master batches for thermoplastics.
UNIQ [®] SPERSE P-138	30	•	•			Wetting and dispersing additive for SMC/BMC and pultrusion to homogenize and stabilize the system, and to increase the color homogeneity in molding compounds. Improved fiber wetting and therefore optimized properties. Additive to prevent phase separation in PS-UP filled molding compounds.
UNIQ [®] SPERSE P-141	50	•	•	•		wetting and dispersing additive for amine-accelerated UP, EP and, PUR systems a nd adhesives to reduce the viscosity in mineral-filled systems. Strong viscosities reduction.
UNIQ [®] SPERSE P-144	50	•	•	•	•	Wetting and dispersing additive for filled unsaturated polyester resins as well PU, epoxy and acrylic to reduce viscosity and prevent settling
UNIQ [®] SPERSE P-145	100	•	•	•	•	Processing additive with mold release properties for low-shrink SMC and BMC. The zinc stearate that is usually used as a mold release agent is completely replaced by the additive, which can simplify raw material handling. The most important property is the anti-separation of the LS-SMC/BMC compounds and thus cobwebbing is reduced.
UNIQ [®] SPERSE P-160	50	•	•	•		wetting and dispersing additive in unsaturated resin systems and adhesives. The additive prevents the flooding/floating and settling of pigments and fillers in epoxy and VE/UP-based laminates. Reduction in the flooding/floating of colored pigments in gel coats.
UNIQ [®] SPERSE P-185	100	•	•	•		Esolvent-free wetting and dispersing additive, very suitable for solvent-borne and solvent-free adhesives, PVC plastisols, ambient curing resin systems, and for the production of color masterbatches for thermoplastics. Particularly recommended for organic pigments, inorganic pigments, carbon black and co-grinding processes.
UNIQ [®] SPERSE P-190	100	•	•	•	•	Wetting and dispersing additive for filled, unsaturated polyester systems and epoxy systems, also suited for gelcoats to avoid flooding and floating of TiO2
UNIQ [®] SPERSE P-191	100	•		•	•	wetting and dispersing additive for filled unsaturated polyester. The dispersant is especially suitable for inorganic pigments, filler pigments and ATH. Strong viscosities reduction.
UNIQ [®] SPERSE P-199	100	•		•	•	wetting and dispersing additive for filled unsaturated polyester eg calcium carbonate and ATH. Strong viscosities reduction.
UNIQ [®] SPERSE P-950	100				•	Solvent-free wetting and dispersing additive for PVC plastisols and thermoplastics applications. It's suitable for producing liquid color masterbatches. The dispersant is highly recommended for inorganic pigments, zinc oxide, blowing agents (azodicarbonamide) and fillers. Strong viscosity reduction.
UNIQ [®] SPERSE P-962	100				•	Wetting and dispersing additive for PVC plastisols for a better incorporation of inorganic pigments and fillers. Increases the color strength, minimizes settling and prevents the separation of the plasticizer, particularly recommended for inorganic fillers, zinc oxide and blowing agents (azodicarbonamide).
UNIQ [®] SPERSE P-405	100	•	•	•	•	liquid rheology additive for plastic applications such as vinyl ester and epoxy res ins, unsaturated polyester resins, and gel coats. It can reinforce the rheological effectiveness of fumed silica and organophilic phyllosilicates (organoclays).



Additives recommendation

	Dispersants			Wetting & Leveling	Defoamers
	Inorganic	Organic	Co-grinding / post add		
	UNIQSPERSE			UNIQFLOW	UNIQFOAM
Gelcoat	P-190	P-185	P-160	P-304 415S 495U	P-555 P-570 P-571
UPR - putties	P-144 P-141 P-120			P-304	P-555
Composites epoxy	P-130 P-190 LP8730	P-185 P-134 P-135	P-134 P-160 P-185	P-304 415S 495U	P-555 P-570 P-571

	Wetting and dispersing agents	Processing agents	Anti-seperation agents	Fiber wetting agents	Defoamers
	UNIQSPERSE				UNIQFOAM
SMC/BMC	P-190 P-191 LP8730	P-145 P-405	P-134 P-136 P-138	P-134 P-138	P-540 P-555 P-571

	TiO ₂	Inorganic pigments	Organic pigments	Carbon Black	
	UNIQSPERSE			Acidic / Neutral	Basic
	Thermoplastics - liquid masterbatches	P-950 P-191 LP8730	P-191 P-185 P-130 LP8730	P-133 P-134 P-135 P-137	P-134 P-135

	TiO ₂	Inorganic pigments	Organic pigments	Carbon Black	Defoamers
	UNIQSPERSE				UNIQFOAM
PVC plastisols	P-950 P-191 LP8730	P-191 LP8730	P-134 P-135 605S / 615S	P-134 P-135	P-555 P-509 P-595 P-571