



## Regional Headquarters

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Dec. 2020

# Product Brochure

Paint Additives  
Ink and inkjet additives  
Ambient curing systems  
SMC / BMC and PVC plastisols



  
**UNIQ CHEM**  
*Creative Solutions!*





**UNIQ<sup>®</sup> FOAM**  
**UNIQ<sup>®</sup> FLOW**  
**UNIQ<sup>®</sup> SPERSE**  
**UNIQ<sup>®</sup> JET**  
**UNIQ<sup>®</sup> VIS**  
**UNIQ<sup>®</sup> LIGHT**

## Company Introduction

**UNIQCHEM** is a privately owned specialty additive company with holding company in the UK founded in 2009.

As the premier leader in manufacturing and development of high-performance additives, the global network of **UNIQCHEM** covers many countries in Europe, America and Asia with regional headquarters in Germany, China and USA.

The regional headquarters consisting of a dedicated team of professionals with decennia of experience in the development, application know-how, production manufacturing, technical service and sales of additives for coatings, inks, inkjet and ambient curing systems and PVC plastisols industry.

Our manufacturing and development of innovative high performance specialty additives are based in Germany and China. Global purchasing of raw materials is taking place from Germany to guarantee the consistency of our products.

Our technology platform contains of many technologies: free radical polymerization, poly-addition reactions, poly-condensation reactions, hydrosilation and special blending technologies.

From our global technical service lab network, we offering our customers the best solutions of product recommendations. We are committed creating added value and improving our customers' formulations with our complete range of specialty additives offering them the right solution.

**UNIQ<sup>®</sup>FOAM** for defoamers and air release agents, **UNIQ<sup>®</sup>FLOW** for wetting and leveling agents, **UNIQ<sup>®</sup>SPERSE** and **UNIQ<sup>®</sup>JET** for wetting and dispersing agents, **UNIQ<sup>®</sup>LIGHT** for HALS and light stabilizers and **UNIQ<sup>®</sup>VIS** for specialties have achieved worldwide recognition for their performance, quality and technical innovation.

We continue to bring new technologies and products to the markets and to work collaboratively with our customers to build on our technical expertise.

Special attention is given to our development of new products. To be innovative, our products needs to give an added value to our customers. Therefore, we continuous developing new products with improved features. That our R&D is successful is proven by the sales of new product developed in the last years. New in-house developed technologies have nowadays about 50% contributions to our global sales, what should be further increase in the coming years.

We want to be your solution partner in specialty additives by strengthening your market position through technology and service,therefore our slogan is 'Customized Solutions':

- Creative Solutions to our Customers by finding solutions and sharing technical experiences through our corporation.
- Creative Solutions to our employees by offering them career opportunities and a safe and healthy working environment.
- Creative Solutions for the future and our environment by making use of environmentally friendly raw materials and less or/and non-polluting products serving the new upcoming technologies.

Our goal is to be the fastest growing and most competitive supplier of specialty additives in this market by offering the best service, supply and samples by our communication, corporation and commitment to you.





History

2010

- UNIQCHEM UK founded
- UNIQCHEM Shanghai Co., Ltd and UNIQCHEM GmbH founded

2012

- UNIQCHEM set up lab and offices in China

2015

- UNIQCHEM starts R&D and production in China

2018

- UNIQCHEM GmbH moves office to Nordhorn, upgrade lab facilities
- EM China achieves high-tech enterprise qualification from Chinese government

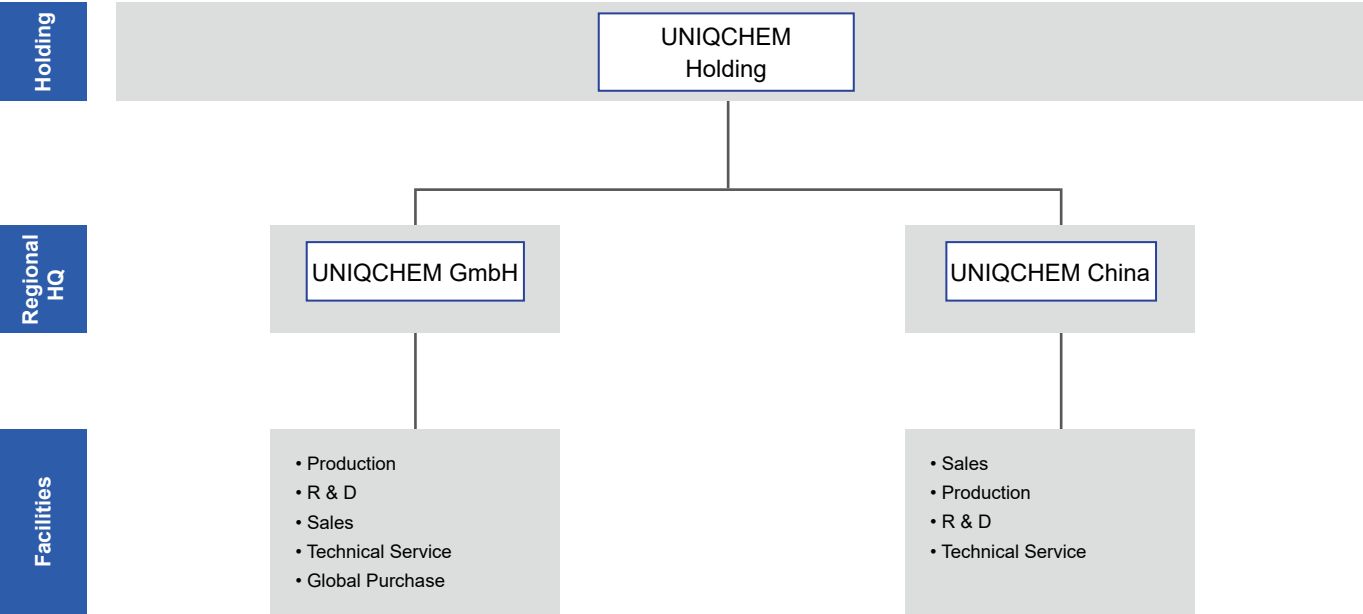
2019

- UNIQCHEM opens Technical Center Asia in Shanghai, 1300 m<sup>2</sup> lab and training center

Global organisation



Company structure



Product lines and nomenclature

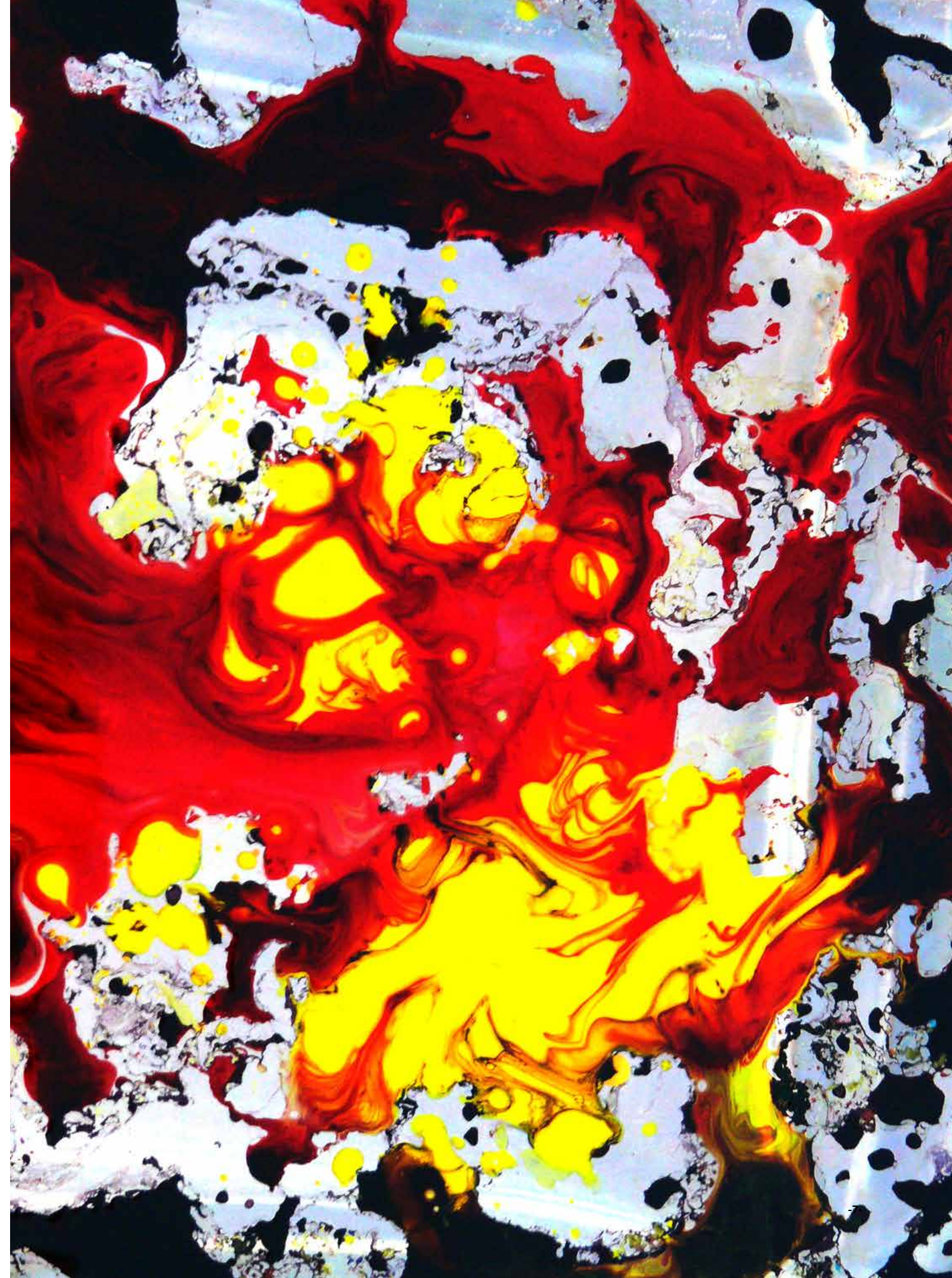
	Brandname	Coatings	Ink	Plastic
Defoamers / Air release additives	UNIQ <sup>®</sup> FOAM	100 - 200	7000	P-5xx
Flow and wetting additives	UNIQ <sup>®</sup> FLOW	300 - 400	6000	P-3xx
Wetting and Dispersing additives	UNIQ <sup>®</sup> SPERSE UNIQ <sup>®</sup> JET	500 - 600 - 700	9000 9000	P-1xx - P-9xx
Rheology modifiers	UNIQ <sup>®</sup> VIS	800		
Light stabilizers	UNIQ <sup>®</sup> LIGHT	900		



S = Solvent based  
W = Water borne  
U = Universal



# Additives for Paint and Coatings







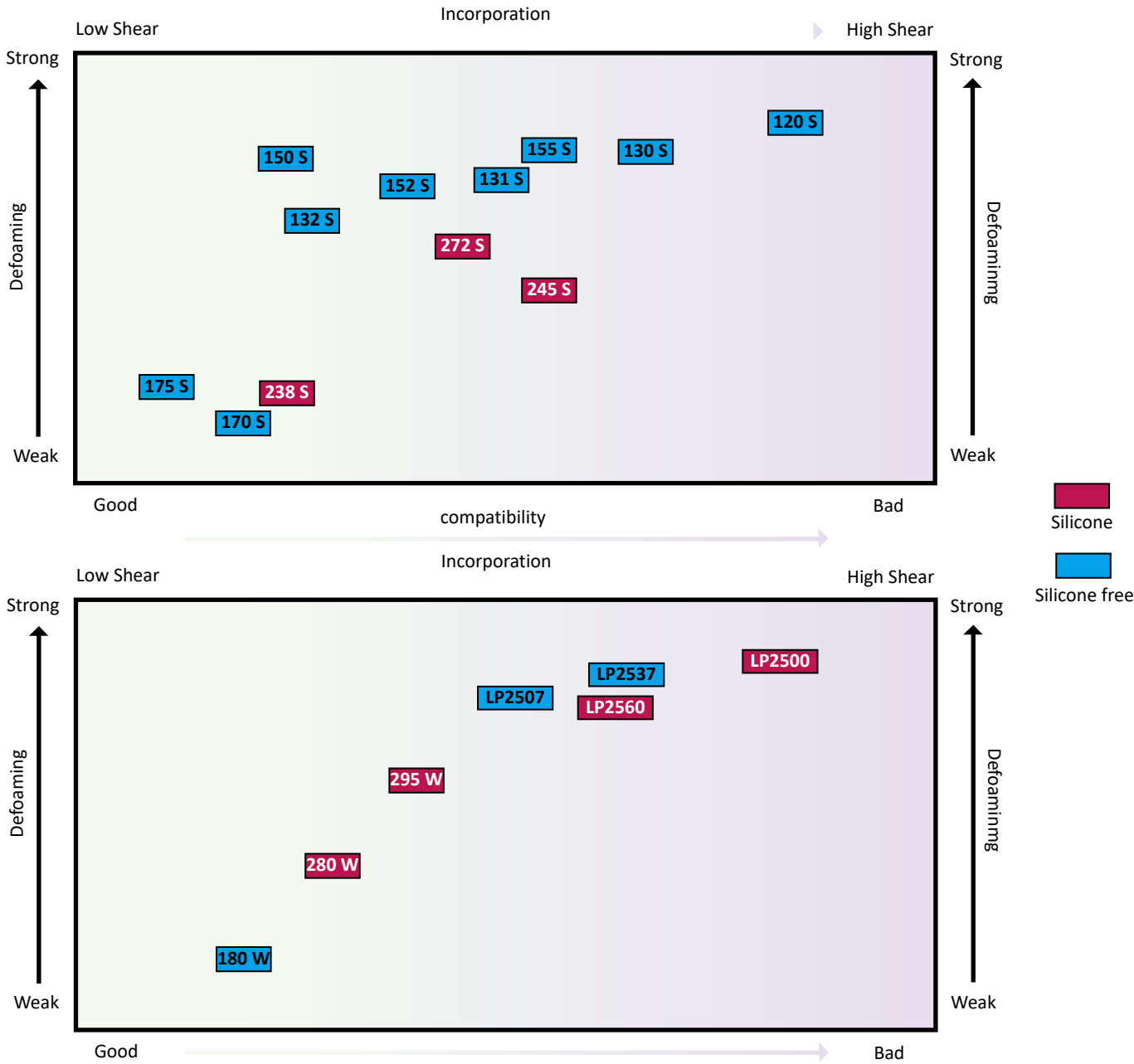
PRODUCT	DESCR	DOSAGE (%)	PROPERTIES	WB	SB	SF
DEFOAMERS						
UNIQ®FOAM 120 S	Non silicone	0.1-1.0	Strong defoamer, can cause haze in high gloss clear		■	
UNIQ®FOAM 130 S		0.1-1.0	Strong defoamer, very suitable for UPE and clear		■	
UNIQ®FOAM 131 S		0.1-1.0	Strong defoamer, very suitable for clear coating		■	
UNIQ®FOAM 132 S		0.1-1.0	Strong defoamer, very suitable for clear coating		■	
UNIQ®FOAM 150 S		0.1-1.0	is a strong defoamer especially suitable for solvent		■	■
UNIQ®FOAM 152 S		0.1-1.0	Suitable for solvent free epoxy and solvent free UV		■	■
UNIQ®FOAM 155 S		0.1-1.0	Suitable for solvent free epoxy system with strong		■	■
UNIQ®FOAM 170 S		0.1-1.0	Suited for UPE, HS coatings like epoxy and 2K PU		■	■
UNIQ®FOAM 175 S		0.1-1.0	Suited for OPV, UV and High gloss coatings		■	
UNIQ®FOAM 180 W		0.3-3.0	Levelling and anti-popping additive	■		
UNIQ®FOAM LP2507	Silicone	0.1-1.0	Suited for WB systems and pigment concentrates	■		
UNIQ®FOAM LP2537		0.3-1.0	Suited for WB decorative coatings	■		
UNIQ®FOAM 235 S		0.1-0.6	All round defoamer for spray, rolling, brushing and curtail coatings		■	
UNIQ®FOAM 238 S		0.1-0.7	Suited for top coating		■	
UNIQ®FOAM 245 S		0.1-0.6	All round defoamer for spray, rolling, brushing and curtail coatings, with strong micro-foam destroying		■	
UNIQ®FOAM 272 S		0.1-1.0	Very suited for HS epoxy and 2K PU coating system		■	■
UNIQ®FOAM 280 W		0.1-1.0	Defoamer for high gloss coating, coating systems, excellent compatibility	■		
UNIQ®FOAM 295 W		0.1-1.0	Strong high shear stable defoamer for grinding processes	■		
UNIQ®FOAM LP2500		0.1-1.0	Strong high shear stable defoamer for topcoats, airless and airmix spraying and pigment concentrates	■		
UNIQ®FOAM LP2560		0.1-1.0	Strong high shear stable defoamer for grinding processes	■		

In industrial processes, foam can cause serious problems like:

- They cause defects on surface coatings.
- They prevent the efficient filling of containers.

To avoid these issues, the need for a defoamer or air-release agents is necessary. UNIQCHEM offers these additives under the brand **UNIQ®FOAM**.

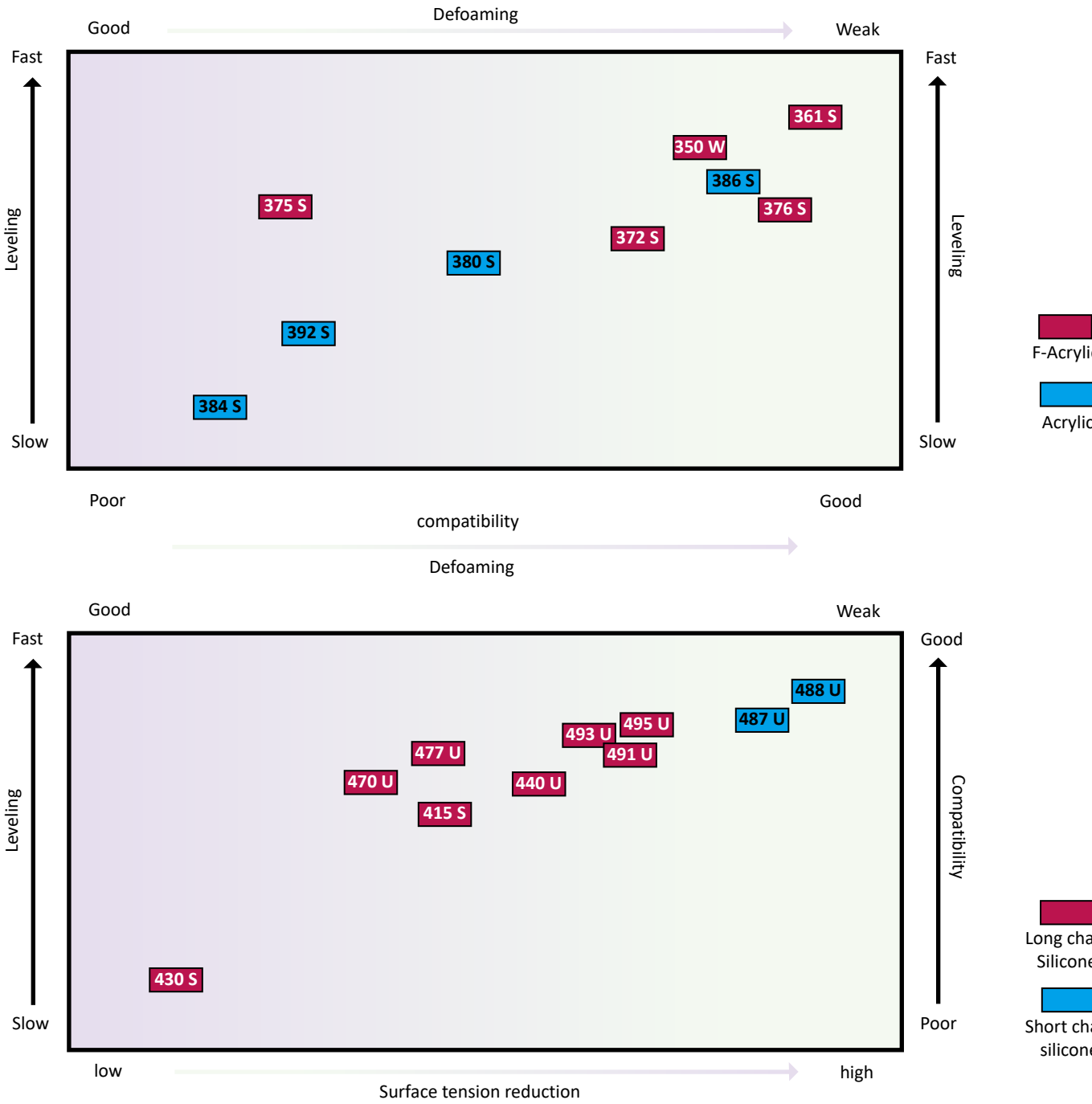
A defoamer or an anti-foaming agent is a chemical additive that reduces and hinders the formation of foam in industrial process liquids or is added to break a formed foam already. We can make a distinction between macro- and micro-foam. Macro-foam is often formed at the surface of the coating and micro-foam is entrapment of small air bubbles, they are not able to raise fast enough to the surface. For micro foam you need a so-called air release agent to coagulate the micro bubbles to bigger air bubbles so they can raise faster to the surface to be destroyed.





PRODUCT	DESCR.	ACTIVE	DOSAGE (%)	PROPERTIES	WB	SB	SF
Wetting agents and Surface modifiers							
UNIQ®FLOW 350 W	Fluor Modified Acrylate	100	0.1-1.0	Anti-crater and leveling	■	■	■
UNIQ®FLOW 361 S		100	0.05-0.5	Anti-crater and wetting for high gloss coating, causing no haze		■	■
UNIQ®FLOW 372 S		60	0.1-1.0	All round levelling agent, more polar,no haze in clear	■	■	■
UNIQ®FLOW 375 S		70	0.1-1.0	All round levelling agent with defoaming performances		■	
UNIQ®FLOW 376 S		70	0.1-1.0	Suitable for high gloss clear coating, fast leveling and high clarity.		■	
UNIQ®FLOW 380 S	Acrylic polymer	100	0.1-1.0	Leveling agent with some deaeration properties		■	■
UNIQ®FLOW 384 S		100	0.0-1.0	Leveling agent with strong deaeration/air-release performances		■	■
UNIQ®FLOW 386 S		50	0.1-1.0	Leveling agent with balanced performance		■	
UNIQ®FLOW 392 S		50	0.1-1.0	Leveling agent with anti popping and deaeration properties		■	
UNIQ®FLOW 400 U	Modified Polysiloxane	50	0.1-1.0	All round silicone leveling agent	■	■	
UNIQ®FLOW 415 S		15	0.1-1.0	Very good short wave leveling with good slip performance		■	
UNIQ®FLOW 430 S		100	0.1-1.0	Levelling agent with strong air-release properties		■	■
UNIQ®FLOW 437 S		NA	1.0-5.0	Prevent pinholes, needles, blisters		■	
UNIQ®FLOW 440 U		50	0.1-0.3	Anti-crater and high slip	■	■	
UNIQ®FLOW 470 U		100	0.1-1.0	Very good leveling in UV coating with strong tape release	■	■	■
UNIQ®FLOW 477 U	short chain polysiloxane	100	0.1-1.0	Very good leveling and wetting, high slip and suitable for UV coating	■	■	■
UNIQ®FLOW 487 U		100	0.1-1.0	Surface tension reduction, anti-crater and low foam, no influence on recoatability	■		■
UNIQ®FLOW 488 U		100	0.1-1.0	Strong surface tension reduction and excellent wetting properties, good compatibility, no influence on recoatability	■		■
UNIQ®FLOW 491 U	Modified Polysiloxane	100	0.1-1.0	Very good short wave leveling with good slip performance, high clarity	■	■	■
UNIQ®FLOW 493 U		100	0.1-1.0	Anti-crater, levelling with handfeeling	■	■	■
UNIQ®FLOW 495 U		100	0.1-1.0	Silicone leveling agent with excellent handfeeling	■	■	■

Flow and leveling agents playing a very important role for the superior appearances of your coating. These additives are needed to avoid problems like: orange peel, Bernard cell formation, floating, flooding, craters, fish eyes, fat edge (also called edge crawling).  
Leveling agents, due to the strong surface tension reduction properties can offer good wetting and leveling. (Fluor modified) Acrylic leveling agents gives good long wave leveling and anti-crater performances. These wetting and leveling agents are offered by UNIQCHEM under the brand of **UNIQ®FLOW**.





UNIQ® SPERSE

PRODUCT	DESCRIPTION	ACTIVE	AMINE VALUE	ACID VALUE	PROPERTIES	WB	SB	SF
Dispersing Agents								
UNIQ® SPERSE 510 S	PU dispersant	50	6	14	Suited for TiO <sub>2</sub> , inorganic pigments and matting agents		■	
UNIQ® SPERSE 550 S		45	14		General Industrial coatings, organic and inorganic pigments		■	
UNIQ® SPERSE 560 S		30	8		Dispersant for high performance requirements in industrial applications		■	
UNIQ® SPERSE 580 U	Structured Polymer	100	52		OEM, Refinish. Best in class jetness black in SB + WB	■	■	■
UNIQ® SPERSE 586 U		100	45	3	OEM, Refinish. Best in class jetness black in SB + WB	■	■	■
UNIQ® SPERSE 605 S	Polyester Dispersant	40	19	8	High performance dispersant for industrial coatings suited for all pigments		■	
UNIQ® SPERSE 615 S		40	19	8	High performance dispersant for industrial coatings suited for all pigments		■	
UNIQ® SPERSE 630 U	Structured Polymer	100	40		OEM, Refinish, suited mainly for WB HPP organic pigments.	■	■	■
UNIQ® SPERSE 650 U	Modified Acrylic Polyester	100		14	Very all round dispersing agent, suited for organic (incl transparent pigments) and inorganic pigments	■	■	■
UNIQ® SPERSE 670 U	Structured Polymer	100	70	42	Dispersing agents for transparent iron oxide, matting agents, inorganic materials	■	■	■
UNIQ® SPERSE 680 U		100	65	9	High performance dispersant for all applications. Suited for all pigments.	■	■	■
UNIQ® SPERSE 685 U	Modified Acrylic Polyester	100		12	Industrial application, epoxy flooring, avoids color floatations	■	■	■
UNIQ® SPERSE 690 W	Modified Block Polymer	40	15	15	Suited for organic and inorganic pigments, excellent compatibility	■		
UNIQ® SPERSE 700 S	Synergist	100			Suited for black, green, blue and viole to improve the viscosy reduction and stability		■	■
UNIQ® SPERSE 710 S	Phosphoric acid	50		80	Excellent for TiO <sub>2</sub> , fillers and extenders, low viscosities		■	
UNIQ® SPERSE 711 S		100		140	100% version of 710S		■	■
UNIQ® SPERSE 730 U	Carboxylic acid polyester	100		60	Universal dispersant for TiO <sub>2</sub> , extenders and fillers, strong viscosity reduction	■	■	■
UNIQ® SPERSE 740 U	Unsaturated polyamide and acid ester salts	100	60	33	100% version of 745S		■	■
UNIQ® SPERSE 745 S		50	20	35	improve the pigment wetting and activation of organically Bentonites		■	
UNIQ® SPERSE 764 S	Unsaturated Carboxylic Acid	50		140	Anti flooding dispersant		■	■
UNIQ® SPERSE 765 S		50		125	Anti flooding dispersant with silicone		■	■
UNIQ® SPERSE 770 U		100	88		Dispersant for low polar resins, like long oil alkyd systems	□	■	■
UNIQ® SPERSE LP4540	Poly acrylic Acid	40			Excellent dispersing agent for grinding fillers and TiO <sub>2</sub> for decaorative purpose	■		

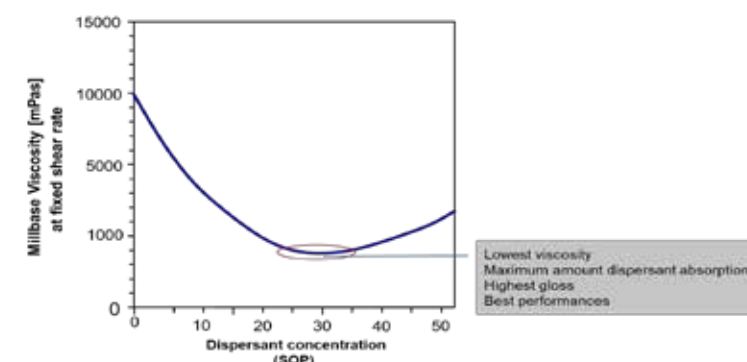
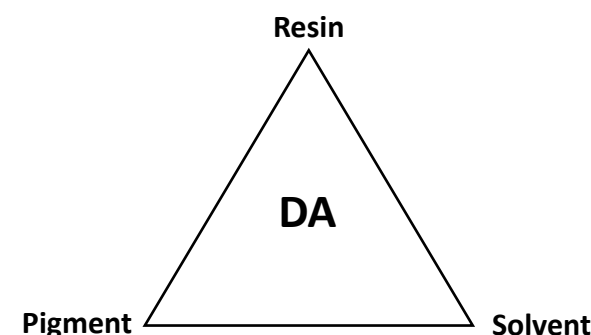
Dispersing agents playing a very important role for the wetting and stabilization of pigments.

The faster the wetting is taking place the faster the stabilization can take place. In this process it is important to be able to reduce the particle size back to the primary particle of the pigment. Than you will achieve the maximum color strength.

Very good dispersing agents will offer you very good viscosity reduction, color strength, reduction in processing time.

These Wetting and dispersing agents are offered by UNIQCHEM under the brand UNIQ® SPERSE.

Very important is to identify the right SOP (solid dispersant on pigment) what depends on the pigment type (color index), surface area, resin and solvent type and may differ from resin to resin and pigment to pigment. Ladder study for optimized dosage on dispersing agnet on pigment is required.



	Inorganic Pigments		Organic Pigments	HPP organic pigments HCC black pigments
Solvent based			680 U	586U
			605S/ 615S	
			560S	
			550S	
		510S / 650U		
		710S / 716S / 730U		
Solvent free				P-134 / 580U
			680U / P-135	
			685U	
Water Based		730U / 711 S / LP8730 / P-191		
				586U
				630U
			680U	
			690W	
			685U	
		730U		
		LP4540A		
		LP4540N		
Decorative		Industrial		Automotive



**UNIQ® VIS**

**UNIQ<sup>®</sup> VIS** is our brand for some special products, like rheology control agents and conductivity agents.

PRODUCT	DESCRIPTION	DOSAGE (%)	PROPERTIES	WB	SB
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## Specialties

UNIQ <sup>®</sup> VIS 840 W	Modified urea	3-10	Prevent drying out of pigment paste	■
UNIQ <sup>®</sup> VIS 880 S	Alkylolammonium salt	0.1-2	Increase the Conductivity of Electrostatically Sprayed Solvent-Borne Coatings	■



**UNIQ® LIGHT** is the brand for our light stabilizers suitable for wood-, plastic-, industrial-, coil-, and automotive coatings.

These products can improve the weather resistance of coatings.

PRODUCT	DESCRIPTION	DOSAGE (%)	PROPERTIES	WB	SB
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## Light Stabilizers

UNIQ® LIGHT 900	Triazine	1-3	High performance UV absorber		■
UNIQ® LIGHT 923	HALS	0.5-3	Acid system HALS		■
UNIQ® LIGHT 992		0.5-3	Cost effective HALS	☐	■
UNIQ® LIGHT 930	Benzotriazole	1-3	Common used UV absorber	☐	■
UNIQ® LIGHT 940	hydroxyphenyl-triazine	1-3	High performance UV absorber	☐	■
UNIQ® LIGHT 951	Blend	1-5	Blend light stabilizer		■
UNIQ® LIGHT 960		1-3	Blend light stabilizer		■



# Additives for Ink and Inkjet





In industrial processes, foam can cause serious problems like:

- They cause defects on surface coatings.
- They prevent the efficient filling of containers.

To avoid these issues, the need for a defoamer or air-release agents is necessary. UNIQCHEM offers these additives under the brand **UNIQ®FOAM**.

A defoamer or an anti-foaming agent is a chemical additive that reduces and hinders the formation of foam in industrial process liquids or is added to break a formed foam already. We can make a distinction between macro- and micro-foam. Macro-foam is often formed at the surface of the coating and micro-foam is entrapment of small air bubbles, they are not able to raise fast enough to the surface. For micro foam you need a so-called air release agent to coagulate the micro bubbles to bigger air bubbles so they can raise faster to the surface to be destroyed.

PRODUCT	DESCR.	DOSAGE (%)	PROPERTIES	WB	SB	UV
DEFOAMERS						
UNIQ®FOAM 7032	Non silicone	0.1-0.7	Strong effective non-silicone defoamer, less inter adhe-sion influence		■	
UNIQ®FOAM 7045		0.1-1.0	Strong effective defoamer, suitable clear varnish		■	
UNIQ®FOAM 7087		0.1-1.0	Excellent compatibility, suitable for high solid formulation		■	
UNIQ®FOAM 7098		0.3-3.0	Anti-foaming and anti-poping in baking system, good leveling	■		
UNIQ®FOAM 7091	Silicone	0.1-0.3	Good compatibility, suitable for high gloss top coating	■		
UNIQ®FOAM 7099		0.1-1.0	Strong effective silicone defoamer, suitable high solid and viscosity system		■	■
UNIQ®FOAM 7108		0.2-1.0	Good compatibility, suitable for high gloss coating	■		■
UNIQ®FOAM 7119		0.1 - 1.5	Effective foam release and defoaming property	■		
UNIQ®FOAM 7124		0.1 - 1.0	Strong defoamer, need high shearing rate to get consistant solution	■		

Flow and leveling agents playing a very important role for the superior appearances of your coating. These additives are needed to avoid problems like: orange peel, Bernard cell formation, floating, flooding, craters, fish eyes, fat edge (also called edge crawling). Leveling agents, due to the strong surface tension reduction properties can offer good wetting and leveling. (Fluor modified) Acrylic leveling agents gives good long wave leveling and anti-crater performances. These wetting and leveling agents are offered by UNIQCHEM under the brand of **UNIQ®FLOW**.

PRODUCT	DESCR.	ACTIVE	DOSAGE (%)	PROPERTIES	WB	SB	UV
Wetting agents and Surface modifiers							
UNIQ®FLOW 6085	Fluor Modified Acrylate	100	0.1-0.5	Excellent fast leveling, good substrate wetting, good defoaming and heat stable	■	■	■
UNIQ®FLOW 6097		100	0.01-0.5	Excellent fast leveling, good substrate wetting, good defoaming and heat stable		■	■
UNIQ®FLOW 6109		60	0.1-2.0	Compatible in water borne and solvent borne, helps in leveling and substrate wetting, suitable in high gloss application	■	■	■
UNIQ®FLOW 6113		70	0.5-1.0	Helps in leveling and substrate wetting, suitable in high gloss application		■	
UNIQ®FLOW 6124	Acrylate	52	0.5-1.5	Good compatibility, and improved leveling, good recoatability and heat stable		■	
UNIQ®FLOW 6135	PDMS	100	0.1-1.0	Excellent substrate wetting, good recoatability	■		■
UNIQ®FLOW 6342		100	0.05-0.3	Good substrate wetting and leveling, improved slip hand feeling, improves scratch resistance	■	■	■
UNIQ®FLOW 6344		100	0.05-0.3	Good substrate wetting and leveling, improved slip hand feeling	■	■	■





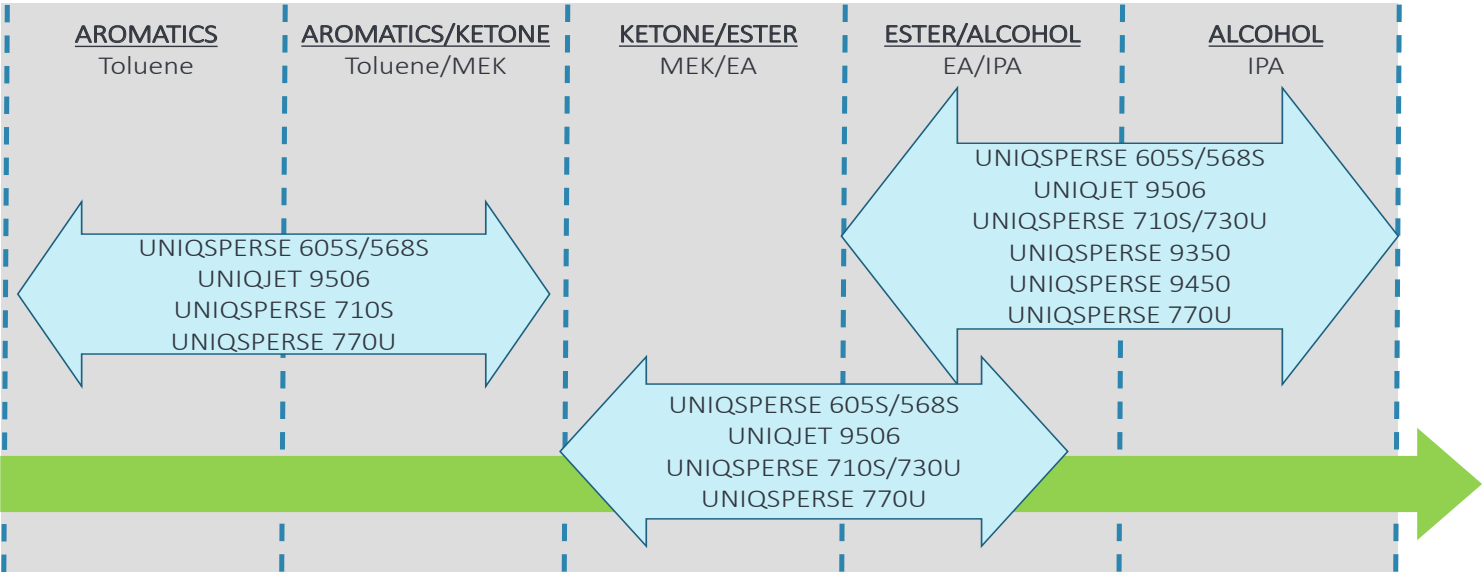
UNIQ<sup>®</sup> SPERSE  
UNIQ<sup>®</sup> JET



PRODUCT	DESCRIPTION	ACTIVE	AMINE VALUE	ACID VALUE	PROPERTIES	WB	SB	UV
Dispersing Agents								
UNIQ <sup>®</sup> SPERSE 9012	Polymeric	40	16	9	Suitable for all the pigments, can be used for pigment concentrates	■		■
UNIQ <sup>®</sup> SPERSE 9330		100		60	TiO <sub>2</sub> and inorganic pigments dispersion, excellent in viscosity reduction	■	■	■
UNIQ <sup>®</sup> SPERSE 9335		35	17		Suitable for all the pigments, can be used for pigment concentrates, excellent transparency and density	■		
UNIQ <sup>®</sup> SPERSE 9350		45	14		Good compatibility with resins and solvents. Suitable for all pigments dispersion		■	
UNIQ <sup>®</sup> SPERSE 9370		100	80		Excellent wetting and dispersing agent compatibility with resins and solvents in high polar area like in alcohols. Suitable for all pigments dispersion		■	
UNIQ <sup>®</sup> SPERSE 9380		100	65	10	Excellent dispersant for all pigments suited for all kind of Ink and digital ink	■	■	■
UNIQ <sup>®</sup> SPERSE 9450		100	3	14	Suitable for universal tinters for all pigments dispersion. Especially good in TiO2 and inorganic pigments dispersion with good sedimentation and anti-floating properties	■	■	

PRODUCT	DESCRIPTION	ACTIVE	AMINE VALUE	ACID VALUE	PROPERTIES	WB	SB	UV
Dispersing Agents								
UNIQ <sup>®</sup> JET 9053	Polymeric	100		12	Suitable for universal tinters for all pigments dispersion. Especially good in TiO2 and inorganic pigments dispersion with good sedimentation and anti-floating properties	■	■	■
UNIQ <sup>®</sup> JET 9506		30	8		Good color developing for most of the organic pigments, improved viscosity, gloss and color strength		■	
UNIQ <sup>®</sup> JET 9510		100	17		Organic and inorganic pigments dispersion, excellent for jetness improvement of carbon black		■	■
UNIQ <sup>®</sup> JET 9520		100	12		Suitable for all pigments dispersion in solvent borne and UV system		■	■
UNIQ <sup>®</sup> JET 9530		100	45	13	Suitable for magenta pigments dispersion in solvent borne and UV system		■	■
UNIQ <sup>®</sup> JET 9550		100	75	11	Excellent color developing for several organic pigments, low viscosity, gloss, color strength and stability		■	■
UNIQ <sup>®</sup> JET 9560		100	50		Excellent color developing for most of the organic pigments, low viscosity, gloss, color strength and stability	■	■	■

Gravure ink



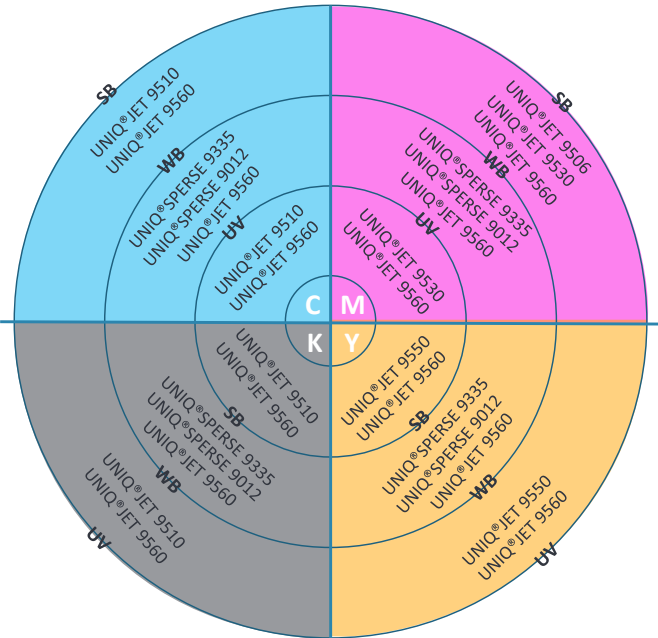
Flexographic ink

Solvent based	Water based
UNIQJET 9053 UNIQSPERSE 9380 UNIQSPERSE 9370 UNIQSPERSE 9330	UNIQJET 9012 UNIQSPERSE 9380 UNIQSPERSE 9335 UNIQSPERSE 9330

UV Offset ink

UV
UNIQJET 9550 UNIQJET 9560 UNIQSPERSE P-134 UNIQSPERSE 9330

Inkjet SB, UV and WB



# **Additives for Composites, SMC/BMC, Ambient curing systems and PVC plastisols**







UNIQCHEM offers a full range of additives for the ambient curing systems, PVC plastisols and composites. This is a range of defoamers, flow agents with strong defoaming properties, wetting and dispersing agents and rheology additives enhancers.

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 the fiber 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 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.

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	51	•		•		Wetting and dispersing additive for filled unsaturated polyester, epoxy systems eg calcium carbonate and ATH. Strong viscosities reduction.
UNIQ®SPERSE P-120	80	•	•	•	•	Wetting and dispersing agent to reduce viscosity and prevents fillers from settling in ambient curing resins and adhesives as well for polyester molding compounds
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 color master batches for thermoplastics. Particularly recommended for acidic carbon black pigments. Excellent anti-separation additive for UPR and thermoplastic resins.
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-136	45	•	•			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-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 and adhesives to reduce the viscosity in mineral-filled systems. Strong viscosities reduction.
UNIQ®SPERSE P-144	50	•	•	•	•	Wetting and dispersing additive for filled unsaturated poyester 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	•	•	•		Solvent-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-193	100	•	•	•	•	wetting and dispersing additive for filled unsaturated polyester, epoxy systems. 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-904	50	•	•	•		Solvent-free wetting and dispersing additive for UPR, epoxy- and vinyl-based systems. Helps reduction of flooding and floating of colored pigments eg in gelcoats. Reinforce the rheological effectiveness of pyrogenic silica to increase and stabilize the thixotropic behavior.
UNIQ®SPERSE P-905	100	•	•	•		Solvent-free wetting and dispersing additive for UPR, epoxy- and vinyl-based systems. Helps reduction of flooding and floating of colored pigments eg in gelcoats. Reinforce the rheological effectiveness of pyrogenic silica to increase and stabilize the thixotropic behavior.
UNIQ®SPERSE P-405	100	•	•	•	•	liquid rheology additive for plastic applications such as vinyl ester and epoxy resins, 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 / fillers	Organic pigments	Co-grinding / post add		
	UNIQSPERSE			UNIQFLOW	UNIQFOAM
Gelcoat	P-190 P-193 LP4417	P-185 P-135	P-160	P-304 415S 495U	P-555 P-570 P-571
UPR - putties	P-144 P-141 P-120			P-304	P-555 P-571
Composites epoxy	730U P-190 / LP4417 P-193	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-separation agents	Fiber wetting agents	Defoamers
	UNIQSPERSE				UNIQFOAM
SMC/BMC	P-114 P-191 P-193	P-145 P-405	P-134 P-136 P-138	P-134 P-138	P-540 P-555 P-571

	TiO <sub>2</sub>	Inorganic pigments	Organic pigments	Carbon Black	
				Acidic / Neutral	Basic
				UNIQSPERSE	
Thermoplastics - liquid masterbatches	P-950 P-191 P-193	P-191 P-185 P-130 P-193	P-134 P-135 P-137	P-134 P-135	P-133

	TiO <sub>2</sub>	Inorganic pigments	Organic pigments	Carbon Black	Defoamers
	UNIQSPERSE				UNIQFOAM
PVC plastisols	P-950 P-191 P-193	P-191 P-193	P-134 P-135 605S / 615S	P-134 P-135	P-555 P-509 P-595 P-571

## Adhesives and sealants



	Defoamer	Substrate wetting	Rheology		viscosity	wetting and dispersing	
			thixotropic	anti-sagging			
Polyurethane	245S P-555	493U 495U	P-904		P-141 P-134	P-120 P-144	
Epoxy	P-570 P-571 P-555	493U 495U	P-904		P-134 P-185	P-120 P-144	P-160
Acrylic		493U 495U	P-904		P-141	P-120 P-144	P-160
Water based	280W 290W 295W	488U 487U			<b>Inorganic</b> 730U		
					<b>Organic &amp; Black</b> 680U		
UV systems	P-555 245S	495U 477U			<b>Inorganic</b> 670U	P-190	P-193
					<b>Organic &amp; Black</b> P-134/P-133	P-185	P-135