Contact worldwide

Asia
BASF East Asia Regional Headquarters Ltd.
45/F, Jardine House
No. 1 Connaught Place
Central
Hong Kong
formulation-additives-asia@basf.com

Europe
BASF SE
Formulation Additives
67056 Ludwigshafen
Germany
formulation-additives-europe@basf.com

North America
BASF Corporation
11501 Steel Creek Road
Charlotte, NC 28273
USA
formulation-additives-nafta@basf.com

South America
BASF S.A.
Av. Faria Lima 3600 – 10° andar
Itaim Bibi – São Paulo – SP
04538-132
Brazil
formulation-additives-south-america@basf.com

EDA 0113e

BASF SE
Formulation Additives
Dispersions & Pigments Division
67056 Ludwigshafen
Germany
www.basf.com/formulation-additives

little helpers love great achievements

Formulation Additives by BASF

BASF
The Chemical Company

Table of contents

A broad platform of formulation additives technologies

BASF, the world's leading chemical company, is a premiere provider of formulation additives for the paints and coatings industry. These unique products help enable performance-driven products which meet the latest and most stringent environmental regulations. Our portfolio comprises a broad technology base of dispersing agents, wetting agents and surface modifiers, defoamers, rheology modifiers and film-forming agents.

With global manufacturing capabilities, a strong research and development platform, full-service regional technical laboratories, pre-screening capabilities and a team of knowledgeable, experienced experts, BASF can help you make your coatings better and help your business to be successful.

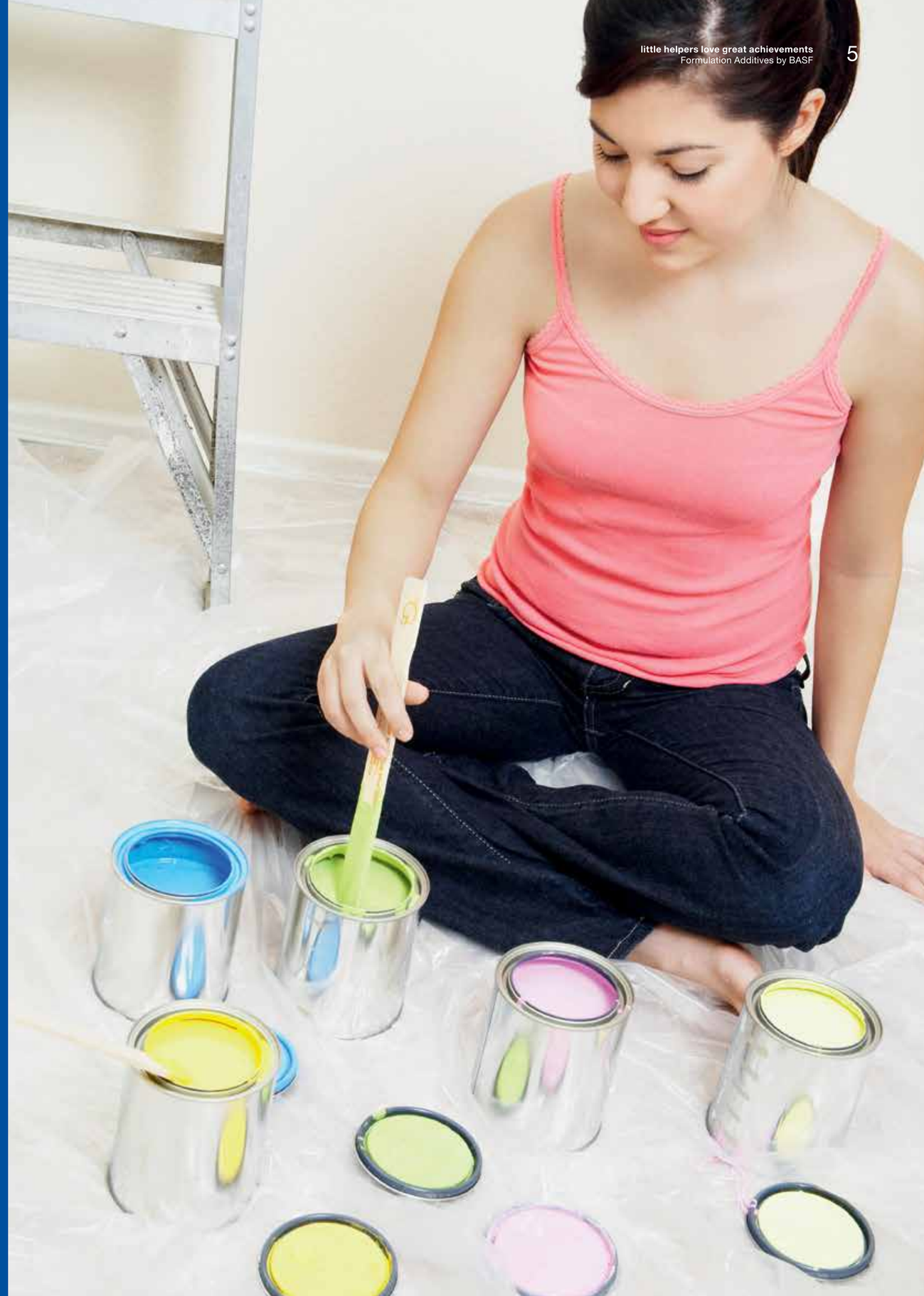
Looking for innovative solutions where little helpers make all the difference for your high quality coatings? At BASF, we create chemistry.

Dispersing agents

Dispersing agents are used to wet and stabilize pigments and other particles within paints, coatings and ink formulations. For formulators they represent an essential component as they provide color strength, gloss, viscosity stability and prevent sedimentation of particles.

At a glance

- dispersing agents for full range of coatings and ink formulations
- highly efficient solutions for aqueous, solvent-based, high solids or 100 % solids systems and for universal pigment concentrates
- broad technology portfolio including polymeric, oligomeric and surfactant-based dispersing agents
- award-winning Controlled Free Radical Polymerization (CFRP) technology allows for higher efficiency and broader compatibility which creates optimal rheology and improved coloristics
- benefits including outstanding viscosity reduction, increased color intensity and hiding power, enhanced gloss, low VOC and APEO-free and improved freeze-thaw stability



Dispersing agents

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
								water-based systems	solvent-based systems	solvent-free systems	
low-molecular-weight dispersing agents mainly designed for water-based systems, surfactant-like types											
Dispex® Ultra FA 4404	Hydropalat® 3204	chelating agent	50	-	-	< 0.1	●	●			anionic dispersing agent; excellent liquefying effect in inorganic pigment slurry formulations
Dispex® Ultra FA 4416	Hydropalat® 216	mixture of surfactants	75	-	-	< 2		●			wetting and dispersing agent for aqueous formulations; suitable for organic and inorganic pigments and pigment concentrates
Dispex® Ultra FA 4420	Efka® 6220	fatty acid modified emulsifier (FAME)	100	35	22	< 1	●	●	●	●	dispersing agent for inorganic fillers and pigments; also suitable as codispersing agent with high-molecular-weight dispersing agents; will improve compatibility and color acceptance of universal colorants in base paints
Dispex® Ultra FA 4425	Efka® 6225		100	47	46	< 1	●	●	●	●	dispersing agent for universal decorative colorants for tinting systems; makes colorants with excellent compatibility and stability
Dispex® Ultra FA 4430	Lumiten® N-OC 30	non-ionic fatty alcohol ethoxylate	30	-	-	-		●			improves storage stability; improves compatibility with pigment pastes (improvement of rub-out problems); improves formulation stability; easier cleaning of equipment
Dispex® Ultra FA 4431	Efka® 6230	aliphatic polyether with acidic groups	100	-	100	< 0.1	●	●	●	●	dispersing agent for inorganic pigments and fillers for decorative and industrial coatings
Dispex® Ultra FA 4437	Hydropalat® 3037	modified natural oil	> 99	-	-	< 0.1	●	●			non-ionic wetting and dispersing agent for aqueous formulations; especially designed for organic pigment concentrates
Dispex® Ultra FA 4480	Hydropalat® 1080	modified fatty alcohol ethoxylate	80	-	-	< 0.1	●	●			universal, non-ionic wetting and dispersing agent; powerful alternative to APEOs; improves gloss development, color intensity and color acceptance
Dispex® Ultra FA 4483	Hydropalat® 7003	phosphoric acid ester	30	-	25	< 0.1	●	●			universal, anionic wetting and dispersing agent; especially suitable for inorganic pigment concentrates
low-molecular-weight dispersing agents mainly designed for solvent-based systems, conventional types											
Efka® FA 4600	Texaphor® Special	surface active anionic compounds	35.5	-	-	27.5			●		anti-settling agent for non-aqueous systems; provides good antisettling properties in polar systems
Efka® FA 4601	Texaphor®	blend of fatty alcohol sulfates	47	-	-	~ 16			●		anti-settling agent for non-aqueous systems; good antisettling properties for medium-polar systems
Efka® FA 4610	Efka® 5010	acidic polyester polyamide	50	-	140	50			●	●	for inorganic pigments; suitable for all types of industrial coatings, dispersion of extenders and fillers in composites (SMC + BMC)
Efka® FA 4612	Efka® 5210		100	-	270	< 2.5			●	●	for inorganic pigments; suitable for all types of industrial coatings, dispersion of extenders and fillers in composites (SMC + BMC)
Efka® FA 4615	Efka® 5215		100	-	180	< 2.5			●	●	for inorganic pigments, suitable for all types of industrial coatings, dispersion of extenders and fillers in composites (SMC + BMC)
Efka® FA 4620	Efka® 5220	acidic polyether	100	-	290	< 2.5		●	●	●	dispersing agent for inorganic pigments; suitable for all types of industrial and decorative coatings, especially TiO_2; dispersion of extenders and fillers in composite formulations (SMC+BMC)
Efka® FA 4642	Efka® 5244	unsaturated polyamide and acid ester salts	100	20	65	< 2.5		●	●	●	solvent-based and solvent-free systems; also effective for gelling bentonite concentrates
Efka® FA 4644	Efka® 5044		52	16	25	48			●	●	solvent-based and solvent-free systems; also effective for gelling bentonite concentrates
Efka® FA 4654	Efka® 5054 N	carboxylic acid salts	52	51	53	48			●		low-polar to medium-polar systems; also for bentonite gels
Efka® FA 4654 EM	Texaphor® 987	salts of a polycarboxylic acid	50	51	51	50			●	●	oligomeric wetting and dispersing agent for medium-to non-polar solvent-based formulations; provides excellent anti-settling and anti-floating properties
Efka® FA 4660	Efka® 6050	fatty acid amide	52	-	-	48			●		dispersing agent especially for fumed silica; well-known in composite formulations for accelerated viscosity build up after spraying
Efka® FA 4663	Texaphor® 963	salts of a polycarboxylic acid	50	56	56	50			●	●	oligomeric wetting and dispersing agent for solvent-based formulations; provides excellent anti-settling and anti-floating properties
Efka® FA 4665	Efka® 5065	unsaturated carboxylic acid, combined with a compatible organically modified polysiloxane	52	-	120	48			●	●	polyurethane systems and stoving enamels; also for orientation of aluminum pigments
Efka® FA 4666	Efka® 5066	unsaturated carboxylic acid	52	-	140	48			●	●	polyurethane systems and stoving enamels; strong anti-settling effect
Efka® FA 4670	Efka® 5070	unsaturated carboxylic acid and esters, combined with a compatible organically modified polysiloxane	52	-	55	48			●		similar to Efka® FA 4665 but with better compatibility in less polar systems

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Dispersing agents

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
								water-based systems	solvent-based systems	solvent-free systems	
low-molecular-weight dispersing agents mainly designed for solvent-based systems, conventional types (cont.)											
Efka® FA 4671	Efka® 5071	alkylol ammonium salt of carboxylic acid	53	100	90	< 1	●	●	●		water- and solvent-based systems; strong anti-settling effects
Efka® FA 4672	Texaphor® SF 71	mixture of ionic and non-ionic esters	99	-	-	< 2			●	●	solvent-free wetting and dispersing agent for reactive resins; specifically designed for inorganic pigments and fillers in epoxy-, UPE- and PUR-full solid systems; provides excellent viscosity reduction
Efka® FA 4673	Texaphor® 873 Conc	anionic aliphatic ester	100	-	-	< 1	●		●	●	dispersing agent for the manufacture of highly concentrated pigment concentrates; especially designed for inorganic pigments
Efka® WE 3110	Lumiten® AQA 10	surfactant blend	85	-	-	< 0.1	●	●	●		outstanding stabilization of water in solvent-based systems (e.g., alkyds), improves formulation stability; compatibilizes colorants in water-based base paints
high-molecular-weight dispersing agents											
Dispex® Ultra PA 4510	Efka® 4510	modified polyacrylate polymer	50	45	20	50		●	●		water-based industrial coatings, solvent-based colorants
Dispex® Ultra PA 4530	Efka® 4530		50	26	35	50		●	●		water-based industrial coatings, solvent-based colorants including NC lacquers
Dispex® Ultra PA 4550	Efka® 4550		50	27	-	< 1	●	●			water-based industrial and automotive coatings, pH-independent, broad compatibility; suitable for making resin-containing and resin-free pigment concentrates
Dispex® Ultra PA 4560	Efka® 4560		40	25	-	< 1	●	●			water-based decorative and industrial coatings, pH-independent; broad compatibility; suitable for making resin-containing and resin-free pigment concentrates
Dispex® Ultra PA 4570	Efka® 4570		60	42	-	40		●	●		water- and solvent-based industrial coatings; can be used to formulate colorants suited for industrial water- and solvent-based systems
Dispex® Ultra PA 4580	Efka® 4580		40	19	-	< 1	●	●			high-end industrial and automotive coatings; suitable for making resin-free and resin-containing pigment concentrates
Dispex® Ultra PA 4590	Efka® 4590		40	40	6	< 20		●	●		water-based industrial and decorative coatings where cost-effective performance is vital; suited for making universal colorants with good compatibility
Dispex® Ultra PX 4275	Hydropalat® 3275	copolymer	37.5	-	-	< 0.5	●	●			high-performance wetting and dispersing agent; specifically designed for semi-gloss and high-gloss paint formulations and pigment concentrates
Dispex® Ultra PX 4575	Dispex® Ultra PX 4575	acrylic block copolymer made by controlled free radical polymerisation (CFRP)	40	32		< 0.1	●	●			VOC-free dispersing agent for water-based systems with benchmark performance in inorganic pigments; excellent overall performance for organic pigments; broad compatibility towards different resin systems; designed for colorants but well suited for grinds into primers, gloss and semi gloss-paints
Dispex® Ultra PX 4585	Efka® 4585		50	20	-	< 0.1	●	●			high-end water-based coatings, industrial and automotive; broad compatibility with different binder systems; pH-independent; suitable for making resin-free pigment concentrates
Efka® FA 4650	Texaphor® 3250	carboxy-functional polymer	50	-	110	50			●	●	polymeric dispersing agent for organic and inorganic pigments in non-aqueous systems; especially designed for high-quality coatings and pigment concentrates
Efka® PA 4400	Efka® 4400	modified polyacrylate polymer	40	42	-	60			●		specifically used in coil coating applications and polyester/melamine stoving enamels
Efka® PA 4401	Efka® 4401		50	50	-	50			●		industrial coatings, transportation topcoats; excellent (viscosity depression) for industrial colorants (pigment pastes) in combination with grinding resins such as Laropal® A 81
Efka® PA 4402	Efka® 4402		40	22	-	60			●	●	mainly used for co-grinding of all kinds of pigment blends in solvent-based coatings as well as in gel coats
Efka® PA 4403	Efka® 4403 N		55	35	-	45			●		for resin-containing pigment concentrates based on alkyd resins
Efka® PA 4414	Efka® 7414		40	40	-	60				●	polyacrylate dispersing agents for energy-curable systems, dispersing agent dissolved in a vinylether monomer; suited for UV flexo, UV screen and UV inkjet applications
Efka® PA 4477	Efka® 7477		40	42	-	60			●		polyacrylate dispersing agent in butylglycol acetate (BGA) solvent; suited for mild-solvent inkjet
Efka® PU 4009	Efka® 4009	modified polyurethane polymer	60	9	13	40			●		general industrial coatings where cost-effective performance is vital
Efka® PU 4010	Efka® 4010	new generation of modified polyurethane polymer	51	6	12	49			●	●	general industrial coatings, wood coatings for stabilization of TiO_2 and matting agents

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Dispersing agents

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
								water-based systems	solvent-based systems	solvent-free systems	
high-molecular-weight dispersing agents (cont.)											
Efka® PU 4015	Efka® 4015	new generation of modified polyurethane polymer	50	10	-	50			●		solvent-based industrial coatings, low viscosity in high-pigmented systems
Efka® PU 4020	Efka® 4020		65	9	-	35			●		aromatic-free dispersing agent for solvent-based industrial coatings and decorative coatings and colorants
Efka® PU 4046	Efka® 4046	modified polyurethane polymer	40	19	-	60			●	●	general industrial coatings
Efka® PU 4047	Efka® 4047		35	17	-	65			●	●	high-quality industrial finishes including automotive OEM and refinish
Efka® PU 4050	Efka® 4050	new generation of modified polyurethane polymer	45	14	-	55			●	●	high-quality industrial finishes including automotive OEM and refinish as well asresin-minimal pigment concentrates
Efka® PU 4055	Efka® 4055		40	13	-	60			●		general industrial coatings as well as resin-minimal pigment concentrates
Efka® PU 4061	Efka® 4061		30	8	-	70			●		high-quality industrial, automotive and refinish applications, strong viscosity-depressing properties
Efka® PU 4063	Texaphor® P 63	modified polyurethane polymer	45	10	-	55			●	●	polymeric dispersing agent for the deflocculation of inorganic and organic pigments in high-quality solvent-based pigment pastes
Efka® PU 4080	Efka® 4080	new generation of modified polyurethane polymer	30	4	-	70			●		strong viscosity-depressing properties
Efka® PX 4300	Efka® 4300	acrylic block copolymer made by controlled free radical polymerisation (CFRP)	80	56	-	20			●		solvent-based industrial and decorative coatings including medium- and long-oil alkyds
Efka® PX 4310	Efka® 4310		50	19	-	50			●		high-quality solvent-based industrial and automotive coatings; setting new standards as a dispersing agent for resin-free pigment pastes for coil coatings and dispersing agent for carbon blacks giving extremely high jetness
Efka® PX 4320	Efka® 4320		50	28	-	50			●		high-quality solvent-based industrial coatings, due to its more polar character compared to Efka® PX 4310 better suitability for thermoplastic acrylates
Efka® PX 4330	Efka® 4330		70	28	-	30			●		solvent-based industrial and decorative coatings; excellent (broad compatibility) for industrial colorants (pigment pastes) in combination with grinding resins such as Laropal® A 81
Efka® PX 4340	Efka® 4340		55	4	-	45			●		solvent-based high-end applications, industrial and automotive systems; good performance in CAB-modified systems but also with 2-pack PUR and 2-pack epoxy
Efka® PX 4700	Efka® 7700		80	60	-	20			●		dispersing agent for high-performance applications such as dispersion of organic pigments in inkjet formulations; especially strong-solvent formulations
Efka® PX 4701	Efka® 7701		100	40	-	< 2.5			●	●	dispersing agent for high-performance pigments especially for energy-curable systems; especially for UV inkjet; also for solvent-based applications, both mild-solvent and strong-solvent
Efka® PX 4702	Efka® 7702		50	20	-	< 0.1	●	●			advanced dispersing agent for classical and high-performance pigments, to be used in water-based inkjet formulations
Efka® PX 4711	Efka® 7711		70	28	-	30			●		dispersing agent for high-performance pigments; suitable for a broad polarity range of inks from apolar to strong-solvent systems; potentially suitable for use with PU resins
Efka® PX 4731	Efka® 7731	advanced dispersing agent	100	25	-	< 2.5			●	●	dispersing agent for high-performance pigments especially for energy-curable systems; also for solvent-based applications both mild-solvent and strong-solvent; peak performance in mild-solvent systems
Efka® PX 4732	Efka® 7732		100	25	-	< 2.5			●	●	dispersing agent for high-performance pigments especially for energy-curable systems; also for solvent-based applications both mild-solvent and strong-solvent; peak performance in strong-solvent systems
anionic dispersing agents based on polyacrylic acid											
Dispex® AA 4030	Pigment disperser A	ammonium polyacrylate (co-)polymer	30	-	-	< 0.1	●	●			standard dispersing agent for inorganic fillers and pigments
Dispex® AA 4040	Dispex® A 40		44-45	-	-	-		●			standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Dispersing agents

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
								water-based systems	solvent-based systems	solvent-free systems	
anionic dispersing agents based on polyacrylic acid (cont.)											
Dispex® AA 4135	Pigment disperser NL	sodium polyacrylate (co-)polymer	35	-	-	< 0.1	●	●			standard dispersing agent for inorganic fillers and pigments
Dispex® AA 4140	Dispex® N 40		43-45	-	-	-		●			standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect
Dispex® AA 4145	Pigment disperser S		45	-	-	< 0.6	●	●			standard dispersing agent for inorganic fillers and pigments
Dispex® CX 4230	Hydropalat® 100	ammonium polyacrylate (co-)polymer	28	-	-	< 0.5	●	●			medium-hydrophobic dispersing agent for interior and exterior architectural coatings; good liquefying effect
Dispex® CX 4231	Ultradispers® AB 30		30	-	-	≤ 1	●	●			for inorganic pigments and extenders, improves adhesion and gloss, lowers snail-trail tendency of exterior paints; leads to highest contact angles (e.g. for water-repellent effect paints)
Dispex® CX 4234	Hydropalat® 34	styrene-acrylic copolymer	35	-	-	< 0.5	●	●			hydrophobic dispersing agent for interior and exterior architectural coatings; provides excellent hydrophobicity and scrub resistance
Dispex® CX 4240	Dispex® GA 40	ammonium polyacrylate (co-)polymer	40	-	-	-		●			for inorganic pigments and extenders; more hydrophobic than Dispex® AA 4040
Dispex® CX 4320	Pigment disperser MD 20	sodium salt of carboxylic acid copolymer	25	-	-	< 0.1	●	●			excellent dispersing perfomance, improves gloss, improves wet-scrub resistance, improves blocking resistance, excellent ZnO-compatibility
Dispex® CX 4325	Dispex® HDN	sodium polyacrylate (co-)polymer	40	-	-	-		●			for inorganic pigments and extenders; improves gloss, reduces haze
Dispex® CX 4340	Dispex® G 40		40	-	-	-		●			for inorganic pigments and extenders; more hydrophobic than Dispex® AA 4140
Dispex® CX 4345	Ultradispers® MD 21	sodium salt of carboxylic acid copolymer	45	-	-	≤ 1	●	●			leads to highest wet-scrub resistance, hydrophobic character
Dispex® CX 4910	Dispex® N 100	sodium polyacrylate (co-)polymer	99	-	-	-		●			powder product with excellent properties; can be used in dry preparations
universal dispersing resins for resin-minimal pigment concentrates (RMPC)											
Dispex® Ultra PA 4500	Efka® 1500	fatty-acid-modified polymer	90	-	39	10		●	●		modified polyester for water- and solvent-based RMPC
Dispex® Ultra PA 4501	Efka® 1501		100	-	41	< 0.2	●	●	●	●	modified polyester for water- and solvent-based RMPC, liquid resin for the production of low-VOC pigment concentrates
Dispex® Ultra PA 4502	Efka® 1502		95	-	-	< 0.2	●	●			modified polyester for water-based RMPC
Dispex® Ultra PA 4503	Efka® 1503		75	-	-	< 1	●	●			self-emulsifying polyester for water-based decorative pigment concentrates; also improves colorant acceptance in solvent-based alkyd systems
Dispex® Ultra PA 4516	Efka® 1016	modified polyacrylate polymer in water	30	-	-	-		●			for water-based pigment concentrates
Efka® PA 4101	Efka® 1101	modified polyacrylate in solvent	60	-	-	40			●		hydroxy-functional acrylic resin for solvent-based RMPC

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Dispersing agents

Product selector

Product name	Old product name	Description	Water-based coatings															100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																				
											air-drying coatings																				
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
low-molecular-weight dispersing agents mainly designed for water-based systems, surfactant-like types																															
Dispex® Ultra FA 4404	Hydropalat® 3204	chelating agent	□	■	■	■	■	■	□		■	■	■	■																	
Dispex® Ultra FA 4416	Hydropalat® 216	mixture of surfactants			■	■	■			■	■	■	■	■		■	■														
Dispex® Ultra FA 4420	Efka® 6220	fatty-acid-modified emulsifier (FAME)							■		■	■	■	■		■	■			■	■	■	■	■	■						
Dispex® Ultra FA 4425	Efka® 6225								■		■	■	■	■		■	■			■	■	■	■	■	■						
Dispex® Ultra FA 4430	Lumiten® N-OC 30	non-ionic fatty alcohol ethoxylated						■		■																					
Dispex® Ultra FA 4431	Efka® 6230	aliphatic polyether with acidic groups							■		■	■	■	■		■	■			■	■	■	■	■	■		■		■	■		
Dispex® Ultra FA 4437	Hydropalat® 3037	modified natural oil							□		■	■	■	■		■	■				□										
Dispex® Ultra FA 4480	Hydropalat® 1080	modified fatty alcohol ethoxylate							■		■	■	■	■		■	■														
Dispex® Ultra FA 4483	Hydropalat® 7003	phosphoric acid ester	□	■	■	■	□	■	■	■	■	■	■	■		■	■														
low-molecular-weight dispersing agents mainly designed for solvent-based systems, conventional types																															
Efka® FA 4600	Texaphor® Special	surface active anionic compounds																				■	□	■	□					□	
Efka® FA 4601	Texaphor®	blend of fatty alcohol sulfates																					■	■	■	■			■	■	
Efka® FA 4610	Efka® 5010	acidic polyester polyamide																			■			■		■		■	■	■	■
Efka® FA 4612	Efka® 5210																			■	■			■		■		■	■	■	■
Efka® FA 4615	Efka® 5215																			■	■			■		■		■	■	■	■
Efka® FA 4620	Efka® 5220	acidic polyether			■	■		■			■	■	■	■		■	■		■	■	■	■	■	■	■	■	■	■	■	■	■
Efka® FA 4642	Efka® 5244	unsaturated polyamide and acid ester salts																		■	■		■	■	■	■		■	■	■	
Efka® FA 4644	Efka® 5044																				■		■	■	■	■		■	■	■	
Efka® FA 4654	Efka® 5054 N	carboxylic acid salts																					■	■				■	■	■	
Efka® FA 4654 EM	Texaphor® 987	salts of a polycarboxylic acid																		■	■	□	■	■	□	□		□	■	■	
Efka® FA 4660	Efka® 6050	fatty acid amide																			■			■				■	■		
Efka® FA 4663	Texaphor® 963	salts of a polycarboxylic acid																		■	■	□	■	■	□	□		□	■	■	

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Dispersing agents

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
low-molecular-weight dispersing agents mainly designed for solvent-based systems, conventional types (cont.)																																
Efka® FA 4665	Efka® 5065	unsaturated carboxylic acid, combined with a compatible organically modified polysiloxane																				■	■		■		■	■	■	■	■	
Efka® FA 4666	Efka® 5066	unsaturated carboxylic acid																				■							■	■	■	
Efka® FA 4670	Efka® 5070	unsaturated carboxylic acid and esters, combined with a compatible organically modified polysiloxane																						■		■			■	■	■	
Efka® FA 4671	Efka® 5071	alkylol ammonium salt of carboxylic acid			■	■		■		■	■	■	■	■		■	■						■	■	■						■	
Efka® FA 4672	Texaphor® SF 71	mixture of ionic and non-ionic esters																			■	■				■	■		■	■		
Efka® FA 4673	Texaphor® 873 Conc	anionic aliphatic ester																		■	■	■	■	■	■	■	■		■	■	■	
Efka® WE 3110	Lumiten® AQA 10	surfactant blend			□	□	□	■	□	■	■	■	■											■	■							
high-molecular-weight dispersing agents																																
Dispex® Ultra PA 4510	Efka® 4510	modified polyacrylate polymer									■	■	■	■		■	■						■				■					
Dispex® Ultra PA 4530	Efka® 4530	modified polyacrylate polymer									■	■	■	■		■	■						■		■		■		■		■	
Dispex® Ultra PA 4550	Efka® 4550	modified polyacrylate polymer			■	■	■		■	■	■	■	■	■		■	■							■								
Dispex® Ultra PA 4560	Efka® 4560	modified polyacrylate polymer			■	■	■		■	■	■	■	■	■		■	■															
Dispex® Ultra PA 4570	Efka® 4570	modified polyacrylate polymer									■	■	■	■		■	■								■				■	■	■	
Dispex® Ultra PA 4580	Efka® 4580	modified polyacrylate polymer			■	■	■		■	■	■	■	■	■		■	■															
Dispex® Ultra PA 4590	Efka® 4590	modified polyacrylate polymer			■	■	■		■		■	■	■	■		■	■															
Dispex® Ultra PX 4275	Hydropalat® 3275	copolymer			■	■	■		■	■	■	■	■	■		■	■															
Dispex® Ultra PX 4575	Dispex® Ultra PX 4575	acrylic block copolymer made by controlled free radical polymerisation (CFRP)				■		■	■	■	■	■	■	■		■	■															
Dispex® Ultra PX 4585	Efka® 4585	acrylic block copolymer made by controlled free radical polymerisation (CFRP)				■		■	■	■	■	■	■	■		■	■															
Efka® FA 4650	Texaphor® 3250	carboxy-functional polymer																		□	□		■		■	□	■		■	■	■	
Efka® PA 4400	Efka® 4400	modified polyacrylate polymer																							■	■			■	■	■	■
Efka® PA 4401	Efka® 4401	modified polyacrylate polymer																					■		■	■		■	■	■	■	■

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Dispersing agents

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
high-molecular-weight dispersing agents (cont.)																																
Efka® PA 4402	Efka® 4402	modified polyacrylate polymer																				■	■		■	■		■	■	■	■	■
Efka® PA 4403	Efka® 4403 N																						■		■	■	■	■	■	■	■	■
Efka® PA 4414	Efka® 7414																			■												
Efka® PA 4477	Efka® 7477																											■				
Efka® PU 4009	Efka® 4009	modified polyurethane polymer																							■	■			■	■	■	
Efka® PU 4010	Efka® 4010	new generation of modified polyurethane polymer																				■	■	■	■	■		■	■	■		
Efka® PU 4015	Efka® 4015																								■	■			■	■	■	
Efka® PU 4020	Efka® 4020																						■	■	■	■			■	■	■	
Efka® PU 4046	Efka® 4046	modified polyurethane polymer																							■	■	■		■	■	■	
Efka® PU 4047	Efka® 4047																					■			■	■	■	■	■	■	■	■
Efka® PU 4050	Efka® 4050	new generation of modified polyurethane polymer																							■	■		■	■	■	■	■
Efka® PU 4055	Efka® 4055																								■	■	■		■	■	■	
Efka® PU 4061	Efka® 4061																						■		■		■	■	■	■	■	■
Efka® PU 4063	Texaphor® P 63	modified polyurethane polymer																							■	■	■		■	■	■	
Efka® PU 4080	Efka® 4080	new generation of modified polyurethane polymer																					■				■	■	■	■	■	■
Efka® PX 4300	Efka® 4300	acrylic block copolymer made by controlled free radical polymerisation (CFRP)																						■	■	■			■	■	■	
Efka® PX 4310	Efka® 4310																								■				■		■	■
Efka® PX 4320	Efka® 4320																						■		■		■		■		■	■
Efka® PX 4330	Efka® 4330																						■	■	■	■	■	■	■	■	■	
Efka® PX 4340	Efka® 4340																						■		■	■			■	■	■	
Efka® PX 4700	Efka® 7700																						■					■	■			
Efka® PX 4701	Efka® 7701																			■	■	■	■				■	■				

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Dispersing agents

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
high-molecular-weight dispersing agents (cont.)																																
Efka® PX 4702	Efka® 7702	acrylic block copolymer made by controlled free radical polymerisation (CFRP)											■	■																		
Efka® PX 4711	Efka® 7711																										■					
Efka® PX 4731	Efka® 7731	advanced dispersing agent																		■	■							■	■	■	■	
Efka® PX 4732	Efka® 7732																			■	■						■	■	■	■	■	
anionic dispersing agents based on polyacrylic acid																																
Dispex® AA 4030	Pigment disperser A	ammonium polyacrylate (co-)polymer		□	■	□	□	■		■																						
Dispex® AA 4040	Dispex® A 40		□	□	■	□	□	■		□																						
Dispex® AA 4135	Pigment disperser NL	sodium polyacrylate (co-)polymer	■	■	■	□	■	■		■																						
Dispex® AA 4140	Dispex® N 40		■	■	■	■	■	■		■																						
Dispex® AA 4145	Pigment disperser S		■	■	■	■	■	■																								
Dispex® CX 4230	Hydropalat® 100	ammonium polyacrylate (co-)polymer		□	■	□		■																								
Dispex® CX 4231	Ultradispers® AB 30			□	■	■	■	■																								
Dispex® CX 4234	Hydropalat® 34	styrene-acrylic copolymer			■			■																								
Dispex® CX 4240	Dispex® GA 40	ammonium polyacrylate (co-)polymer		□	■		□	■		■																						
Dispex® CX 4320	Pigment disperser MD 20	sodium salt of carboxylic acid copolymer	■	■	■	■	■	■		■																						
Dispex® CX 4325	Dispex® HDN	sodium polyacrylate (co-)polymer			□	□	□			■																						
Dispex® CX 4340	Dispex® G 40			■	■		□	■		■																						
Dispex® CX 4345	Ultradispers® MD 21	sodium salt of carboxylic acid copolymer	■																													
Dispex® CX 4910	Dispex® N 100	sodium polyacrylate (co-)polymer	■	■	■	■	■	■		■																						

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Dispersing agents

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
universal dispersing resins for resin-minimal pigment concentrates (RMPC)																																
Dispex® Ultra PA 4500	Efka® 1500	fatty-acid-modified polymer							■		■		■											■	■							
Dispex® Ultra PA 4501	Efka® 1501	fatty-acid-modified polymer							■		■		■									■		■	■				■	■	■	
Dispex® Ultra PA 4502	Efka® 1502	fatty-acid-modified polymer							■		■		■																			
Dispex® Ultra PA 4503	Efka® 1503	fatty-acid-modified polymer							■		■		■											■								
Dispex® Ultra PA 4516	Efka® 1016	modified polyacrylate polymer in water							■		■	■	■	■																		
Efka® PA 4101	Efka® 1101	modified polyacrylate in solvent																					■		■				■	■	■	

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent ☐ good

Wetting agents and surface modifiers

Wetting agents and surface modifiers provide a formulation with adequate wetting properties, enhance different component compatibility and/or improve the appearance of a coating surface. Within this product group, BASF offers wetting agents, flow and leveling agents, and slip agents.

At a glance

- wetting, flow and leveling, and slip agents for aqueous and non-aqueous coatings
- broad technology portfolio including polymeric, oligomeric and surfactant-based products
- slip agents with very good recoatability and wetting properties
- polymeric flow and leveling agents providing excellent intercoat adhesion
- benefits including high efficiency for dosage reduction and universal suitability

Wetting agents and surface modifiers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	VOC content (%)	Recommended for low-VOC systems*	Recommended for: water-based systems	solvent-based systems	solvent-free systems	Features and benefits
substrate wetting agents									
Hydropalat® WE 3110	Hydropalat® 110	alkoxylated surfactants	85	< 0.5	●	●			very low-foaming wetting agent for aqueous formulations; good reduction of dynamic surface tension
Hydropalat® WE 3120	Hydropalat® 120		> 99.5	< 0.5	●	●			low-foaming wetting agent for aqueous formulations; excellent reduction of dynamic surface tension
Hydropalat® WE 3240	Hydropalat® 140	silicone surfactant	48	52		●		●	high-performance silicone-based wetting agent; strong reduction of static surface tension; excellent compatibility
Hydropalat® WE 3475	Hydropalat® 875	sulfosuccinates	75	~ 6		●			highly efficient sulfosuccinate wetting agent; strong reduction of dynamic surface tension; standard product used in overprint varnishes
Hydropalat® WE 3477	Hydropalat® 875 PG		77	~ 6		●			highly efficient sulfosuccinate wetting agent; strong reduction of dynamic surface tension; alternative solvent
Hydropalat® WE 3485	Hydropalat® 885		85	< 2		●			highly efficient special formulation of wetting agents; strong reduction of dynamic surface tension; VOC-free alternative to Hydropalat® WE 3475
Hydropalat® WE 3486	Hydropalat® 886		86	~ 6		●			highly efficient special formulation of wetting agents; strong reduction of dynamic surface tension
Hydropalat® WE 3488	Hydropalat® 88		50	< 2		●			highly efficient sulfosuccinate wetting agent; strong reduction of dynamic surface tension; reduced foaming characteristics
Hydropalat® WE 3650	Hydropalat® WE 3650	modified alkoxylate	> 99	< 0.5	●	●			highly effective, low foaming wetting agent; excellent performance in coatings and inks applications for reduction of dynamic surface tension; high formulation flexibility due to solvent-free delivery form
flow and leveling agents									
Efka® FL 3277	Efka® 3277 N	fluorinated polyacrylates	100	< 2.5			●	●	fluorocarbon-modified polyacrylate; solvent-free version of Efka® FL 3777
Efka® FL 3337	Efka® 3037	solvents	-	> 95			●		solvent blend of high-boiling aromatics, ketones and esters; flow agent, prevents surface defects, cob-webbing, streaking, chilling, shortens setting time
Efka® FL 3600	Efka® 3600 N	fluorinated polyacrylates	100	< 3			●	●	polymeric fluorcarbon compound; stoving enamels based on polyesters or acrylics; 2-pack epoxy and air-dried alkyd systems, strong anti-cratering, leveling and substrate wetting; strongest substrate-wetting agent in the fluorocarbon-modified acrylate range
Efka® FL 3650	Efka® 3650 N		50	50			●		polymeric fluorcarbon compound; diluted version of Efka® FL 3600
Efka® FL 3670	Irgaflow® 110		70	30			●		fluor-modified polyacrylate; solvent-based industrial and wood coatings; higher levelling and anti-crater efficiency than Efka® FL 3770; improved leveling and defoaming performance compared to Efka® FL 3600
Efka® FL 3740	Perenol® F 40	copolyacrylates	> 95	< 0.5			●	●	silicone- and solvent-free flow and leveling agent with air-release properties for non-aqueous coatings
Efka® FL 3741	Perenol® F 41		> 95	< 0.5			●	●	silicone- and solvent-free flow and leveling agent with air-release properties; excellent compatibility
Efka® FL 3745	Perenol® F 45		> 96	< 0.5			●	●	silicone- and solvent-free flow and leveling agent with air-release properties
Efka® FL 3770	Irgaflow® 100	fluorinated polyacrylates	50	50			●		fluor-modified polyacrylate; solvent-based industrial and wood coatings; improved leveling and defoaming performance compared to Efka® FL 3777
Efka® FL 3772	Efka® 3772 N		60	40		●	●		fluorocarbon-modified polyacrylate; leveling and anti-cratering; can be used in both water- and solvent-based systems
Efka® FL 3777	Efka® 3777 N		70	30			●		fluorocarbon-modified polyacrylate; solvent-based systems, coil coatings, OEM and industrial coatings; excellent combination of low foam, substrate wetting and leveling
Efka® FL 3778	Efka® 3778	copolyacrylates	70	30			●	●	acrylic polymer; coil coating, solvent-based and solvent-free systems
Efka® FL 3785	Efka® 3785		50	50			●	●	acrylic polymer; leveling agent for industrial coatings, coil coatings, 2-pack PUR, 2-pack epoxy; stoving enamels
Efka® FL 3930	Perenol® F 30 P	acrylate copolymer on silica	100	< 0.5				●	silicone-free flow and leveling agent in powder form
Hydropalat® WE 3370	Efka® 3570	fluorinated polyacrylates	60	< 10		●			fluorocarbon-modified polyacrylate; excellent substrate wetting, leveling and anti-cratering; problem solver in water-based systems, against scis-sing and has pronounced effect on leveling

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Wetting agents and surface modifiers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
						water-based systems	solvent-based systems	solvent-free systems	
slip and leveling agents									
Efka® SL 3030	Efka® 3030	modified polysiloxanes	52	48		●	●		organically modified polysiloxane; improved slip and mar-resistance, very compatible
Efka® SL 3031	Efka® 3031		52	48			●		organically modified polysiloxane; solvent-based metal, wood and paper coatings including UV-cured
Efka® SL 3033	Efka® 3033		15	85			●	●	organically modified polysiloxane; improved surface flow, excellent compatibility in clear coats
Efka® SL 3034	Efka® 3034 N		52	48		●	●		fluorocarbon-modifified polysiloxane; strong substrate wetting and anti-cratering
Efka® SL 3035	Efka® 3035		52	48		●	●		organically modified polysiloxane; solvent- and water-based coatings, stoving enamels, unsaturated PE including UV-cured
Efka® SL 3200	Perenol® S Conc		> 95	< 0.5	●	●	●	●	universal silicone-based solvent-free slip and leveling agent; suitable for aqueous, solvent-based and UV formulations
Efka® SL 3210	Efka® 7310		100	< 1	●	●	●	●	broad spectrum and efficient flow and slip enhancer; economic solutions
Efka® SL 3236	Efka® 3236		100	< 1	●		●	●	solvent-free modified polysiloxane; solvent-based wood finishes, industrial coatings and solvent-free floor coatings
Efka® SL 3239	Efka® 3239		100	< 1	●		●	●	solvent-free modified polysiloxane; similar to Efka® SL 3236 but stronger defoaming properties
Efka® SL 3244	Perenol® S 44		> 95	< 0.5	●		●	●	excellent reduction of surface tension; pronounced defoaming effect; suitable for non-aqueous and UV formulations
Efka® SL 3258	Perenol® S 58		> 95	< 0.5	●	●	●	●	highly effective solvent-free slip additive and leveling agent; specifically designed for aqueous and UV-curable formulations
Efka® SL 3259	Perenol® S 59		> 95	< 0.5	●		●	●	highly effective solvent-free slip additive and leveling agent for non-aqueous coatings and UV systems
Efka® SL 3288	Efka® 3288		100	< 1	●	●	●	●	organically modified polysiloxane; strong slip and surface smoothness effect for high-gloss industrial coatings
Efka® SL 3299	Efka® 3299		100	< 1	●	●	●	●	organically modified polysiloxane; strong slip and surface smoothness effect for high-gloss industrial coatings
Efka® SL 3883	Efka® 3883	reactive polysiloxanes	70	30			●	●	polysiloxane-modified with unsaturated terminal groups; UV-curing systems for wood, plastic and paper coatings
Efka® SL 3886	Efka® 3886		50	50			●		polysiloxane-modified polyisocyanates; polyurethane wood coatings including moisture-cured
Efka® SL 3888	Efka® 3888		45	55			●		polysiloxane-modified polyisocyanates; polyurethane metal coatings

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Wetting agents and surface modifiers

Product selector

Product name	Old product name	Description	Water-based coatings															100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																				
											air-drying coatings																				
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
substrate-wetting agents																															
Hydropalat® WE 3110	Hydropalat® 110	alkoxylated surfactants					□				■	■	■	■		■	■														
Hydropalat® WE 3120	Hydropalat® 120				■	■	□			■	■	■	■	■		■	■														
Hydropalat® WE 3240	Hydropalat® 140	silicone surfactant			■	■	■			■	■	■	■	■		■	■			■											
Hydropalat® WE 3475	Hydropalat® 875	sulfosuccinates			■	■	□				■	■	■	■		■	■														
Hydropalat® WE 3477	Hydropalat® 875 PG				■	■	□				■	■	■	■		■	■														
Hydropalat® WE 3485	Hydropalat® 885				■	■	□			■	■	■	■	■		■	■														
Hydropalat® WE 3486	Hydropalat® 886				■	■	□			■	■	■	■	■		■	■														
Hydropalat® WE 3488	Hydropalat® 88				■	■	□				■	■	■	■		■	■														
Hydropalat® WE 3650	Hydropalat® WE 3650	modified alkoxylate			■	■	□			■	■	■	■	■		■	■														
flow and leveling agents																															
Efka® FL 3277	Efka® 3277 N	fluorinated polyacrylates																		■	■	■	■	■	■	■	■	■	■	■	■
Efka® FL 3337	Efka® 3037	solvents																					■		■		■		■	■	■	
Efka® FL 3600	Efka® 3600 N	fluorinated polyacrylates																		■	■		■		■	■	■	■	■	■	■	■
Efka® FL 3650	Efka® 3650 N																						■		■	■	■	■	■	■		
Efka® FL 3670	Irgaflow® 110																		■	■		■		■	■	■	■	■	■		■
Efka® FL 3740	Perenol® F 40	copolyacrylates																	■	■	■	■	■		■	■	■		■	■	■	
Efka® FL 3741	Perenol® F 41																		■	■	■	■	■		■	■	■		■	■	■	
Efka® FL 3745	Perenol® F 45																		■	■	■	■	■		■	■	■		■	■	■	
Efka® FL 3770	Irgaflow® 100	fluorinated polyacrylates																					■		■	■	■	■	■	■	■	■
Efka® FL 3772	Efka® 3772 N				■	■	■				■	■	■	■		■	■						■		■	■	■	■	■	■		
Efka® FL 3777	Efka® 3777 N																						■		■	■	■	■	■	■	■	■

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Wetting agents and surface modifiers

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
flow and leveling agents (cont.)																																
Efka® FL 3778	Efka® 3778	copolyacrylates																			■	■	■		■	■	■		■	■	■	■
Efka® FL 3785	Efka® 3785																				■	■	■		■	■	■		■	■	■	■
Efka® FL 3930	Perenol® F 30 P	acrylate copolymer on silica																	■													
Hydropalat® WE 3370	Efka® 3570	fluorinated polyacrylates			■	■				■	■	■	■	■		■	■															
slip and leveling agents																																
Efka® SL 3030	Efka® 3030	modified polysiloxanes				■	□				■	■	■	■		■	■						■	■	■	■	■		■	■	■	
Efka® SL 3031	Efka® 3031																						■				■	■				
Efka® SL 3033	Efka® 3033																					■					■		■	■	■	
Efka® SL 3034	Efka® 3034 N					■	□			■	■	■	■	■		■	■												■	■	■	
Efka® SL 3035	Efka® 3035					■	□			■	■	■	■	■								■		■	■	■			■	■	■	
Efka® SL 3200	Perenol® S Conc																			■	■	■	■	■	■	■	■		■		■	
Efka® SL 3210	Efka® 7310					■	□			■	■	■	■	■						■	■	■		■	■	■	■	■	■	■	■	
Efka® SL 3236	Efka® 3236																			■	■	■		■	■	■			■	■	■	
Efka® SL 3239	Efka® 3239																			■	■	■		■	■	■			■	■	■	
Efka® SL 3244	Perenol® S 44																			■	■	■	■	■	■	■	■		■		■	
Efka® SL 3258	Perenol® S 58										■	■	■	■						■	■	■	■	■	■	■	■		■		■	
Efka® SL 3259	Perenol® S 59										■	■	■	■						■	■	■	■	■	■	■	■		■		■	
Efka® SL 3288	Efka® 3288					■	□			■	■	■	■	■		■	■			■	■	■		■	■	■			■	■	■	
Efka® SL 3299	Efka® 3299					■	□			■	■	■	■	■						■	■	■		■	■	■			■	■	■	

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Wetting agents and surface modifiers

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
slip and leveling agents (cont.)																																
Efka® SL 3883	Efka® 3883	reactive polysiloxanes																		■		■										
Efka® SL 3886	Efka® 3886																				■						■		■			
Efka® SL 3888	Efka® 3888																				■						■		■			

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Defoamers

Defoamers suppress and destroy foam and its negative effects prior to and during application of a coating. By removing or inhibiting air bubbles they are important process aids throughout the paint production as well as the application process. Paint manufacturers benefit from foam-free production processes by reaching their desired results much quicker and do not have to worry about additional negative side effects, for example inaccurate filling of containers due to entrapped air. During application the build up of foam has to be prevented to ensure an optimum paint surface without any remaining bubbles or other surface defects.

At a glance

- broad selection of defoamer technologies including products based on mineral oils or native oils as well as specialty-emulsion defoamers, organo-silicone-based and silicone-free products and star-polymer defoamers

- focus on establishing a perfect balance between excellent foam suppression, high compatibility, long-term efficiency, easy handling and environmental compliance in form of VOC-free, low S-VOC and low odor solutions

Defoamers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Incorporation	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
							water-based systems	solvent-based systems	solvent-free systems	
defoamers designed to be used in water-based systems										
Foamaster® MO 2108	Foamaster® H 2	mineral-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	●			highly efficient defoamer with outstanding defoaming persistency; specifically designed for deep-tint paints
Foamaster® MO 2111	Foamaster® 111		100	grinding stage / let-down	< 0.1	●	●			broad-spectrum defoamer specifically designed for water-based paints and coatings, printing inks as well as latex adhesive systems; excellent efficiency in systems with coarse ingredients
Foamaster® MO 2114	Foamaster® 714		100	grinding stage / let-down	< 2		●			versatile defoamer for emulsion paints and polymer emulsions; especially suitable for acrylic and styrene-acrylic formulations; versatile defoamer for lowly and highly pigmented emulsion paints; effectively eliminates micro-foam even in critical applications
Foamaster® MO 2121	Foamaster® DF 201		~ 65	grinding stage / let-down	< 0.1	●	●			cost-efficient universal defoamer for flat emulsion paints and plasters
Foamaster® MO 2122	Foamaster® DF 124 L		100	at any stage of the production process	< 0.1	●	●			very effective defoamer for aqueous emulsion-based paints as well as for monomer stripping
Foamaster® MO 2134	Foamaster® 8034		100	grinding stage / let-down	< 0.1	●	●			universal defoamer for aqueous emulsion-based coatings and plasters with outstanding long-term efficiency
Foamaster® MO 2135	Foamaster® 8034 E		100	at any stage of the production process	< 0.5	●	●			very compatible defoamer with fast knock-down effect; designed for low-viscous paints, adhesives as well as for monomer stripping
Foamaster® MO 2150	Foamaster® 50		100	grinding stage / let-down	< 0.1	●	●			very efficient universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings; exceptional product stability
Foamaster® MO NDW	Foamaster® NDW		100	at any stage of the production process	< 0.1	●	●			universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous paints and coatings; high compatibility - does not cause fish eyes
Foamaster® MO NXZ	Foamaster® NXZ		100	at any stage of the production process	< 0.1	●	●			universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings and adhesives; good compatibility - does not cause fish eyes
Foamaster® NO 2306	Foamaster® 306	native-oil-based defoamers	100	at any stage of the production process	< 0.5	●	●		●	universal defoamer free from mineral oil and silicone oil; effectively removes micro-foam
Foamaster® NO 2335	Foamaster® 350		100	grinding stage / let-down	< 0.1	●	●			universal, highly efficient defoamer based on renewable raw materials for emulsion paints; excellent defoamer for mat to satin-finish aqueous coatings; extremely low SVOC content
Foamaster® WO 2323	Foamaster® 223	white-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	●		●	effective defoamer specifically designed for emulsion paints
Foamaster® WO 2350	Dehydran® P 3215		100	during monomer stripping	< 0.1	●	●			defoamer for monomer stripping in latex manufacturing and emulsion polymerization
Foamaster® WO 2390	Dehydran® P 3290		100	during monomer stripping	< 0.5	●	●			defoamer for monomer stripping in latex manufacturing and emulsion polymerization; specifically designed to be used in styrene butadiene latex production
FoamStar® ED 2521	Dehydran® SE 1	emulsion defoamers	~ 20	grinding stage / let-down	< 0.1	●	●			excellent defoamer emulsion for all flat to semi-gloss aqueous coatings; easy to incorporate; good foam suppression during grinding as well as during application; retains antifoam efficiency even during extended storage; extremely low SVOC content
FoamStar® ED 2522	Dehydran® SE 2		~ 20	at any stage of the production process	< 0.1	●	●			high-performance, ultra-low-SVOC silicone emulsion defoamer for premium water-based paints, clear coats and inks; excellent storage stability; extremely low SVOC content
FoamStar® ED 2523	FoamStar® ED 2523		~ 27	grinding stage / let-down	< 0.1	●	●			ultra-low SVOC, emulsion defoamer for medium to high PVC architectural coatings
FoamStar® ED 2526	Efka® 2526		~ 80	before or after processing	< 1	●	●			water-based coatings, strong defoamer for both millbase and let-down; shows good effects in alkyd emulsions
FoamStar® ED 2527	Efka® 2527		~ 80	before or after processing	< 1	●	●			water-based industrial coatings
FoamStar® PB 2724	Dehydran® 240	polymer defoamers / special defoamers	100	at any stage of the production process	< 0.5	●	●			defoamer with wetting properties for aqueous industrial paints and coatings; free from mineral and silicone oils
FoamStar® PB 2770	Dehydran® D		100	at any stage of the production process	< 0.1	●	●			defoamer for aqueous industrial paints and coatings; free from mineral and silicone oils
FoamStar® PB 2788	Efka® 2788		-	at any stage of the production process	< 25		●			solution of a defoaming polymer in isopropanol, water-based coatings and inks; good performance in surfactant containing formulations
FoamStar® PB 2922	Dehydran® 1922	powder defoamers	100	mixtures in powder form	< 0.1	●	●			emission-free powder defoamer, good compatibility and high efficiency in gypsum-based systems; imparts good flow properties
FoamStar® PB 2941	Foamaster® PD 1		100	mixtures in powder form	< 0.1	●	●			powder defoamer for mortars, putties, paste fillers, tile adhesives and self-leveling flooring systems

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Defoamers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Incorporation	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
							water-based systems	solvent-based systems	solvent-free systems	
defoamers designed to be used in water-based systems (cont.)										
FoamStar® SI 2201	Efka® 7201	modified polydimethylsiloxane-based defoamers	100	at any stage of the production process	< 1	●	●			defoamer for water-based inks and varnishes; easy to incorporate with best-in-class defoaming efficiency for flexo applications and for overprint varnishes; excellent performance with colloidal resins used in paper and paperboard applications and in the manufacture of imitation wood laminates
FoamStar® SI 2210	Dehydran® 1620		100	at any stage of the production process	< 0.5	●	●		●	100 %-active-content defoamer for non-pigmented and low-pigmented aqueous coatings, printing inks, adhesives and UV-curable systems; provides a strong spontaneous defoaming effect; outstanding long-term defoaming persistency
FoamStar® SI 2213	Dehydran® 1513		100	at any stage of the production process	< 0.1	●	●			very compatible defoamer for clear and low-pigmented paints and coatings and for aqueous flexo inks; highly effective with excellent compatibility
FoamStar® SI 2216	Dehydran® 1650		100	grinding stage	< 0.5	●	●			highly effective defoamer for aqueous pigment concentrates and systems with high surfactant content
FoamStar® SI 2227	Dehydran® 1227		100	at any stage of the production process	< 0.1	●	●			silicone defoamer for emulsions paints and coatings; good spontaneous and long-term defoaming effect; specifically designed for low-PVC or high-gloss emulsion paints
FoamStar® SI 2250	Efka® 2550		100	grinding stage / final production	< 1	●	●			water-based coatings and pigment concentrates where high-shear processing or application exists; most effective in the range
FoamStar® SI 2260	Efka® 2560		100	at any stage of the production process	< 1	●	●			water-based coating systems containing low surfactant levels
FoamStar® SI 2270	Efka® 2570		100	at any stage of the production process	< 1	●	●			water-based clear-coat applications, water-based pigment concentrates
FoamStar® SI 2280	Efka® 2580		100	at any stage of the production process	< 1	●	●		●	water-based acrylic, low-PVC and baking systems, water-based pigment concentrates; defoamer with good compatibility and good defoaming
FoamStar® SI 2292	Dehydran® 1293		10	at any stage of the production process	90		●			highly compatible silicone-based defoamer solution for high-gloss paints and varnishes based on acrylics and polyurethane dispersions; minimized risk of cratering
FoamStar® SI 2293	Dehydran® 2293		100	at any stage of the production process	< 0.5	●	●			VOC-free, highly compatible silicone-based defoamer solution for high-gloss paints and varnishes based on acrylics and polyurethane dispersions; minimized risk of cratering
FoamStar® ST 2438	FoamStar® A 38	star polymer-based defoamers	100	grinding stage / let-down	< 0.5	●	●			silicone-based defoamer for high-quality water-based paints, delivering excellent long-term persistency and foam knock down
FoamStar® ST 2441	FoamStar® A 410		100	grinding stage / let-down	< 3	●	●			silicone-free defoamer for low- to high-gloss systems; good compatibility
FoamStar® ST 2454	FoamStar® MF 324		100	at any stage of the production process	0.5	●	●			silicone-free defoamer, especially suitable for aqueous wood, industrial and automotive coatings; outstanding long-term stability, highly efficient in PUR emulsions
defoamers designed to be used in non-aqueous systems										
Efka® PB 2001	Perenol® E 1	solvent-based solution of defoaming substances, silicone-free	26	before or after processing	74	N/A		●	●	silicone-free air-release agent for non-aqueous coatings such as epoxy, polyurethane or UPE systems
Efka® PB 2010	Efka® 2010		-	before or after processing	~ 80	N/A		●	●	silicone-free defoamer for broad use in solvent-based systems; well suited for clear systems due to the improved compatibility when compared to Efka® PB 2020
Efka® PB 2018	Efka® 2018 N		-	before or after processing	> 95	N/A		●		polyurethane, acid-cure and NC wood finishes
Efka® PB 2020	Efka® 2020		-	before or after processing	~ 80	N/A		●	●	acid-cured and NC-curtain coating systems, unsaturated polyester and gelcoats; broad use silicone-free defoamer
Efka® PB 2021	Efka® 2021 N		-	end of processing	> 90	N/A		●		2-pack polyurethane, acid-cure and stoving enamels
Efka® PB 2050	Efka® 2050		-	prior to processing	~ 70	N/A		●	●	thin-layer gel-coat, unsaturated polyesters cured at room temperature, casting resins and epoxy resin systems (e.g., floorings)
Efka® PB 2720	Efka® 2720		-	before or after processing	~ 60	N/A		●	●	unsaturated polyester, epoxy and polyurethane systems

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

N/A: Not Applicable

Defoamers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Incorporation	VOC content (%)	Recommended for low-VOC systems*	Recommended for			Features and benefits
							water-based systems	solvent-based systems	solvent-free systems	
defoamers designed to be used in non-aqueous systems (cont.)										
Efka® SI 2008	Perenol® E 8	solvent-based solution of defoaming substances with modified silicone compounds	-	before or after processing	99	N/A		●	●	silicone-based highly efficient air-release agent with excellent compatibility with non-aqueous coatings such as epoxy, polyurethane or UPE systems
Efka® SI 2022	Efka® 2022		-	before or after processing	> 90	N/A		●		polyurethane curtain coatings and stoving enamels
Efka® SI 2023	Efka® 2023 N		-	before or after processing	> 90	N/A		●		polyurethane, acid-cure and NC wood finishes
Efka® SI 2025	Efka® 2025		-	before or after processing	> 95	N/A		●		physically drying systems and air-drying alkyds
Efka® SI 2035	Efka® 2035		-	final production	> 95	N/A		●	●	physically drying systems and medium- to long-oil air-drying alkyds
Efka® SI 2038	Efka® 2038 N			final production	> 95	N/A		●		polyurethane, acid-cure and NC wood varnishes, good compatibility
Efka® SI 2040	Efka® 2040		-	final production	> 95	N/A		●		solvent-based industrial and decorative finishes, including roller, brush and airless spray applications
Efka® SI 2721	Efka® 2721		-	at any stage of the production process	> 95	N/A			●	UV-curing and EBC systems; highly effective defoaming in clear and matted systems; defoaming substances in 2-ethylhexyl acrylate
Efka® SI 2722	Efka® 2722		-	before or after processing	> 70	N/A		●	●	solvent-free epoxy and polyurethane systems
Efka® SI 2723	Efka® 2723		-	prior to processing	< 25	N/A		●	●	solvent-free epoxy and polyurethane systems, low odor, high-solid 2-pack systems and solvent-free radiation-curing systems
Efka® SI 2741	Efka® 7241		-	before addition of pigments / fillers	> 90	N/A		●		defoamer for solvent-based systems, effective in nitrocellulose and polyurethane-based formulations
Efka® SI 2750	Efka® 7250		-	before or after processing	> 95	N/A		●		defoamer for solvent-based inks, especially acetate-reduced nitrocellulose and polyurethane-based; easier to incorporate than Efka® SI 2741; free of aromatic solvents

All products APEO-free

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

N/A: Not Applicable

Defoamers

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
defoamers designed to be used in water-based systems																																
Foamaster® MO 2108	Foamaster® H 2	mineral-oil-based defoamers	■	■	■		□	■		□																						
Foamaster® MO 2111	Foamaster® 111		■	■	■			■		□																						
Foamaster® MO 2114	Foamaster® 714		■	■	■	□	□	■		□																						
Foamaster® MO 2121	Foamaster® DF 201		■	■	□			■		■																						
Foamaster® MO 2122	Foamaster® DF 124 L		■	■	□			■		■								■														
Foamaster® MO 2134	Foamaster® 8034		■	■	■	□	□	■		□																						
Foamaster® MO 2135	Foamaster® 8034 E		■	■	■	□	□	■		□																						
Foamaster® MO 2150	Foamaster® 50		■	■	□			■		■																						
Foamaster® MO NDW	Foamaster® NDW		■	■	□			■		□																						
Foamaster® MO NXZ	Foamaster® NXZ		■	■	□			■		□																						
Foamaster® NO 2306	Foamaster® 306	native-oil-based defoamers		■	■	□	■	■		■						■			■		□						■	■				
Foamaster® NO 2335	Foamaster® 350			■	□		□	■		■																						
Foamaster® WO 2323	Foamaster® 223	white-oil-based defoamers		■	■	□	□	■		■	□	□	□	□	□	□	■		■													
Foamaster® WO 2350	Dehydran® P 3215																■															
Foamaster® WO 2390	Dehydran® P 3290																■															
FoamStar® ED 2521	Dehydran® SE 1	emulsion defoamers	■	■	■			■		■																						
FoamStar® ED 2522	Dehydran® SE 2			□	■	■	■	■		■	■	■	■	■	■	■	□															
FoamStar® ED 2523	FoamStar® ED 2523		■	■	■	□	□	■		□																						
FoamStar® ED 2526	Efka® 2526				■	■	■	■		■	■	■	■	■	■	■																
FoamStar® ED 2527	Efka® 2527				■	■	■	■		■	■	■	■	■	■	■																
FoamStar® PB 2724	Dehydran® 240	polymer defoamers / special defoamers									□	□	■	■	□	□																
FoamStar® PB 2770	Dehydran® D			■																												
FoamStar® PB 2788	Efka® 2788	native-oil-based defoamers									■	■	■		■																	

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Defoamers

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
defoamers designed to be used in water-based systems (cont.)																																
FoamStar® PB 2922	Dehydran® 1922	powder defoamers						■																								
FoamStar® PB 2941	Foamaster® PD 1	powder defoamers						■																								
FoamStar® SI 2201	Efka® 7201	modified polydimethylsiloxane-based defoamers										■	■			■																
FoamStar® SI 2210	Dehydran® 1620	modified polydimethylsiloxane-based defoamers		□	□	■	■	■		■	■	■	■	■		■	■			■												
FoamStar® SI 2213	Dehydran® 1513	modified polydimethylsiloxane-based defoamers		□	□	■	■	■		■	■	■	■	■		■	■															
FoamStar® SI 2216	Dehydran® 1650	modified polydimethylsiloxane-based defoamers			□	■		□	■	■	■	■	■	■		■	■															
FoamStar® SI 2227	Dehydran® 1227	modified polydimethylsiloxane-based defoamers	■	■	■	□		■																								
FoamStar® SI 2250	Efka® 2550	modified polydimethylsiloxane-based defoamers			■				■	■	■	■	■	■		■	■															
FoamStar® SI 2260	Efka® 2560	modified polydimethylsiloxane-based defoamers		■	■	■	■	■		■	■	■	■	■		■	■															
FoamStar® SI 2270	Efka® 2570	modified polydimethylsiloxane-based defoamers			■	■	■	■		■	■	■	■	■		■	■															
FoamStar® SI 2280	Efka® 2580	modified polydimethylsiloxane-based defoamers			■	■	■	■		■	■	■	■	■		■	■															
FoamStar® SI 2292	Dehydran® 1293	modified polydimethylsiloxane-based defoamers				■	■				■	■	■	■		■	■															
FoamStar® SI 2293	Dehydran® 2293	modified polydimethylsiloxane-based defoamers				■	■			■	■	■	■	■		■	■															
FoamStar® ST 2438	FoamStar® A 38	star-polymer-based defoamers		□	□	■	■	■		■	■	■	■	■		■	■			■												
FoamStar® ST 2441	FoamStar® A 410	star-polymer-based defoamers		□	■	■	■				■	■	■	□																		
FoamStar® ST 2454	FoamStar® MF 324	star-polymer-based defoamers			■	■	□	□		■	□	■	■	■		■	■															
defoamers designed to be used in non-aqueous systems																																
Efka® PB 2001	Perenol® E 1	solvent-based solution of defoaming substances, silicone-free																		■	■	■	■	■	■	■	■		■	■	■	
Efka® PB 2010	Efka® 2010	solvent-based solution of defoaming substances, silicone-free																		■		■	■	■	■	■	■		■		■	■
Efka® PB 2018	Efka® 2018 N	solvent-based solution of defoaming substances, silicone-free																					■				■		■			
Efka® PB 2020	Efka® 2020	solvent-based solution of defoaming substances, silicone-free																				■	■	■	■		■		■	■	■	■
Efka® PB 2021	Efka® 2021 N	solvent-based solution of defoaming substances, silicone-free																					■						■		■	

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Defoamers

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
defoamers designed to be used in non-aqueous systems (cont.)																																
Efka® PB 2050	Efka® 2050	solvent-based solution of defoaming substances, silicone-free																				■							■	■		
Efka® PB 2720	Efka® 2720																				□	■							■	■		
Efka® SI 2008	Perenol® E 8	solvent-based solution of defoaming substances with modified silicone compounds																		■	■	■	■	■	■	■	■		■	■	■	
Efka® SI 2022	Efka® 2022																							■	■				■			■
Efka® SI 2023	Efka® 2023 N																						■					■	■		■	
Efka® SI 2025	Efka® 2025																						■		■	■	■	■				
Efka® SI 2035	Efka® 2035																						■		■	■			■	■	■	
Efka® SI 2038	Efka® 2038 N																						■				■		■			
Efka® SI 2040	Efka® 2040																			□	□	■	■	■	■	■	■		■	■	■	
Efka® SI 2721	Efka® 2721																			■												
Efka® SI 2722	Efka® 2722																				■	■										
Efka® SI 2723	Efka® 2723																			■	■	■				■			■	■		
Efka® SI 2741	Efka® 7241																						■				■	■				
Efka® SI 2750	Efka® 7250																						■				■	■				

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Rheology modifiers

Rheology modifiers enable formulators to adjust the flow behavior of paints. That way, painters benefit from improved viscosity and application characteristics. For example, rheology modifiers from BASF reduce dripping and spattering of paint during roller or brush application. Sag resistance of a paint is improved by a rapid but controlled viscosity increase after application. During transport and storage of the paint, the rheology modifiers prevent sedimentation of the pigments within a formulation.

At a glance

- broad portfolio of synthetic rheology modifiers, including non-ionic associative (HEUR/HMPE), anionic associative (HASE) and non-associative thickener (ASE) technologies
- focus on water-based systems with highly efficient products that provide additional functionality like wetting properties and health or environmental aspects (free of VOC, odor, APEO and heavy metals)

Rheology modifiers

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Viscosity (mPa·s)	VOC content (%)	Recommended for low-VOC paints*	Tin-free	Recommended for			Features and benefits
								water-based systems	solvent-based systems	solvent-free systems	
Efka® RM 1900	Rilanit® HT Extra	modified hydrogenated castor oil	100	powder	< 0.1	N/A	●		●	●	provides excellent sag resistance for non-aqueous formulations; higher temperature stability
Efka® RM 1920	Rilanit® Special Micro	hydrogenated castor oil	100	powder	< 0.1	N/A	●		●	●	provides excellent sag resistance for non-aqueous formulations; standard thixotropy
Rheovis® AS 1125	Latekoll® D	non-associative thickener: anionic polyacrylate copolymer (ASE)	25	~ 17	< 0.1	●	●	●			non-associative pure acrylic thickener; alkali-swellable emulsion (ASE); low-shear thickener; highly shear thinning; anti-sagging; high yield point; lower water uptake
Rheovis® AS 1130	Viscalex® HV 30		30	~ 5	–		●	●			non-associative pure acrylic thickener; highly efficient low-shear thickener; high shear thinning, anti-sagging and anti-settling; used in pigment and filler slurries but also highly succesful in industrial and automotive formulations for spray applications
Rheovis® AS 1237	Viscalex® VM		30	~ 5	–		●	●			non-associative pure acrylic thickener; mid-shear thickener, provide a Newtonian rheology profile, allows good leveling
Rheovis® AS 1337	Viscalex® VG 2		30	~ 40	–		●	●			non-associative pure acrylic thickener; most Newtonian product in the Viscalex® range
Rheovis® AS 1956	Collacral® DS 6256		> 85	–	–		●	●			non-associative pure acrylic thickener; excellent blushing resistance in clear coats; very high viscosity in the low-shear area; pseudoplastic flow; micronized granulate
Rheovis® HS 1152	Rheovis® 152	associative thickener: anionic polyacrylate copolymer, hydrophobically modified (HASE)	40	–	–		●	●			acrylic thickener with associative thickening; low-shear thickener; for paints and plasters; anti-sagging, prolongues open time
Rheovis® HS 1162	Rheovis® 162		35	< 50	–		●	●			acrylic thickener with associative thickening; thixotropic flow behavior; low water uptake; no impact on wet adhesion even after long water contact
Rheovis® HS 1169	Latekoll® DS 6269		30	< 50	< 0.1	●	●	●			acrylic thickener with associative thickening; low-shear thickener; spray applications; less water uptake; elongation of open time
Rheovis® HS 1212	Rheovis® 112		40	~ 5	< 0.5		●	●			acrylic thickener with associative thickening; mid-shear thickener; improves flow; excellent efficiency; allround product which can be used in most paints systems
Rheovis® HS 1332	Rheovis® 132		40	–	–		●	●			acrylic thickener with associative thickening; high-shear thickener; Newtonian flow behavior; improved leveling; increases coating build-up / layer thickness
Rheovis® PE 1330	DSX® 3000	associative thickener: hydrophobic modified polyether (HMPE)	30	~ 4,500	< 0.1	●	●	●			excellent high-shear thickener; imparts excellent flow
Rheovis® PU 1190	DSX® 3290	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	34	~ 30,000	< 1	●	●	●			strong low-shear thickener; strong pseudoplasticity
Rheovis® PU 1191	DSX® 3291		30	~ 2,800	< 1	●	●	●			next-generation strong low-shear thickener with excellent performance and easy handling; strong pseudoplasticity
Rheovis® PU 1214	DSX® 1514		40	~ 3,500	< 0.3	●		●			mid-shear thickener; nearly Newtonian; excellent balance of high- and low-shear viscosity build
Rheovis® PU 1216	DSX® 1516		43	~ 20,000	34			●			mid-shear thickener; medium pseudoplastic
Rheovis® PU 1250	DSX® 1550		40	~ 3,500	20			●			mid-shear thickener; medium pseudoplastic; provides excellent orientation of effect pigments
Rheovis® PU 1256	DSX® 3256		35	~ 23,000	< 0.5	●		●			mid-shear thickener; slightly pseudoplastic
Rheovis® PU 1270	Collacral® PU 70		26	~ 2,500	~ 35		●	●			highly efficient medium-shear thickener; pseudoplastic behavior; reduces sagging; good leveling
Rheovis® PU 1280	Collacral® PU 80		26	~ 4,000	~ 11		●	●			highly efficient medium-shear thickener; pseudoplastic behavior; reduces sagging; good leveling
Rheovis® PU 1291	DSX® 3801		45	~ 3,000	< 0.1	●	●	●			next-generation VOC-free mid-shear rheology modifier with excellent ICI thickening and easy handling
Rheovis® PU 1331	DSX® 3100		18	~ 4,500	< 0.1	●	●	●			next-generation high-shear thickener; ultra efficient; best in class ICI performance

All products APEO-free except Rheovis® PU 1214 and Rheovis® PU 1250

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

N/A: Not Applicable

Rheology modifiers

Product selector

Product name	Old product name	Description	Water-based coatings															100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																				
											air-drying coatings																				
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
Efka® RM 1900	Rilanit® HT Extra	modified hydrogenated castor oil																		□	■	■		■	■	■	■	■	■	■		
Efka® RM 1920	Rilanit® Special Micro	hydrogenated castor oil																			□	□		■	■	■	■	■	■	■		
Rheovis® AS 1125	Latekoll® D	anionic polyacrylate copolymer (ASE)		□			□	□		■																					
Rheovis® AS 1130	Viscalex® HV 30	anionic polyacrylate copolymer (ASE)		□			□	□		■	■	■	■			■	■														
Rheovis® AS 1237	Viscalex® VM	anionic polyacrylate copolymer (ASE)		□	□		□	□		■																					
Rheovis® AS 1337	Viscalex® VG 2	anionic polyacrylate copolymer (ASE)		□	□		□	□		■																					
Rheovis® AS 1956	Collacral® DS 6256	anionic polyacrylate copolymer (ASE)								■																					
Rheovis® HS 1152	Rheovis® 152	anionic polyacrylate copolymer: hydrophobically modified (HASE)		■	■		■	■		■	■	■	■			■	■														
Rheovis® HS 1162	Rheovis® 162	anionic polyacrylate copolymer: hydrophobically modified (HASE)		□	□	□	■	□		■	■	■	■			■	■														
Rheovis® HS 1169	Latekoll® DS 6269	anionic polyacrylate copolymer: hydrophobically modified (HASE)	□	■	■		■	■		■			■																		
Rheovis® HS 1212	Rheovis® 112	anionic polyacrylate copolymer: hydrophobically modified (HASE)		■	■		■	■		■				■																	
Rheovis® HS 1332	Rheovis® 132	anionic polyacrylate copolymer: hydrophobically modified (HASE)		□	□	□	■	□		■																					
Rheovis® PE 1330	DSX® 3000	associative thickener: hydrophobic modified polyether (HMPE)	■	■	■	■	■	■		■	■	■	■	□		■	□														
Rheovis® PU 1190	DSX® 3290	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■		■	■	■	■	□		■	■														
Rheovis® PU 1191	DSX® 3291	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■		■	■	■	■	□		■	■														
Rheovis® PU 1214	DSX® 1514	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	■	■	■	■	■	■		■	■	■	■	□		■	□														
Rheovis® PU 1216	DSX® 1516	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■			■	■	■	□		■	■														
Rheovis® PU 1250	DSX® 1550	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■			■	■	■	□		■	■														
Rheovis® PU 1256	DSX® 3256	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■		■	■	■	■	□		■	■														
Rheovis® PU 1270	Collacral® PU 70	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■																							
Rheovis® PU 1280	Collacral® PU 80	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)		■	■	■	■	■																							
Rheovis® PU 1291	DSX® 3801	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	■	■	■	■	■	■		■	■	■	■	□		■	□														
Rheovis® PU 1331	DSX® 3100	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	■	■	■	■	■	■		■	■	■	■	□		■	□														

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Film-forming agents

Film-forming agents are used to support the film-forming process of a paint or coating. Within this product group, BASF offers coalescing agents, open-time prolongers and plasticizers.

At a glance

- high-performance coalescents and plasticizers with focus on low VOC
- complete range of open-time prolongers based on renewable raw materials

Film-forming agents

Technical information, features and benefits

Product name	Old product name	Description	Solids (%)	Viscosity (mPa·s)	VOC content (%)	Recommended for low-VOC paints*	Iodine number (gI/100g)	Oxirane content (%)	Recommended for			Features and benefits
									water-based systems	solvent-based systems	solvent-free systems	
coalescents												
Loxanol® CA 5308	Lusolvan® FBH	dicarbonic acid-diisobutyl ester	> 99	~ 6	< 0.1	●			●			outstanding coalescing efficiency; improves wet-scrub resistance; mild odor
open-time prolongers												
Loxanol® OT 5840	Loxanol® DPN	aqueous dispersion of oleochemical compounds	20	600	< 0.1	●			●			open-time prolonger in liquid form; prevents/reduces cracking in resin-based plasters
Loxanol® OT 5843	Loxanol® 842 DP-3		30	~ 5,000	< 0.1	●			●			highly efficient open-time prolonger in paste form for resin-based plasters
Loxanol® OT 5846	Loxanol® 842 DP-6		20	~ 2,000	< 0.1	●			●			highly efficient open-time prolonger in pumpable form for resin-based plasters
Loxanol® OT 5900	Loxanol® P	oleochemical compound	45	powder	< 0.1	●			●			open-time prolonger in powder form
plasticizers												
Efka® PL 5381	Dehysol® D 81	epoxidized soy bean oil		~ 550	< 0.1	●	2.5	6.5		●		epoxy plasticizer
Efka® PL 5382	Dehysol® D 82			~ 550	< 0.1	●	1.25	6.7		●		epoxy plasticizer; approved for food contact
Efka® PL 5520	Dehysol® BS 20 N	butylester of a fatty acid mixture		~ 8	< 0.1	●	70			●		secondary plasticizer; improves sandability, stacking properties, scratch resistance and ensures fast solvent release
Efka® PL 5544	Dehysol® 344	dimethyl cyclohexyl phthalate		~ 20,000	< 0.1	●				●		lowly volatile, migration-resistant plasticizer
Efka® PL 5590	Dehysol® 190	ester of an aliphatic acid		~ 13	< 0.1	●	41			●		secondary plasticizer for polyvinyl chloride (plastisols)
Efka® PL 5616	Dehysol® B 316	epoxidized linseed oil		~ 1,000	< 0.1	●	3.5	8.5 - 10		●		epoxy plasticizer
Efka® PL 5642	Dehysol® DBS	dibutyl sebacate		~ 9	< 0.1	●				●		universal, highly effective plasticizer; low odor; excellent low-temperature performance
Loxanol® PL 5060	Plastilit® 3060	polypropylene glycol alkylphenylether	> 99	~ 90	< 0.1	●			●			outstanding plastification efficiency

All products APEO-free except Loxanol® OT 5843

* Recommended for low-VOC paints and coatings if VOC content < 1 %.
Measurements done according to the ISO 11890-2 analytical method defined in the European Paints Directive 2004/42/EC.
For products with a VOC level above 15 % the value is based on calculation according to recipe.

Film-forming agents

Product selector

Product name	Old product name	Description	Water-based coatings																100 % systems				Solvent-based coatings									
			architectural								industrial and automotive																					
											air-drying coatings																					
			high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	alkyd emulsions	polyurethane emulsions	styrene acrylic / acrylic emulsions	baking coatings / enamels		2-pack PUR coatings	2-pack epoxy coatings	emulsion polymerization / latex handling	powder coatings	UV-curable coatings	2-pack epoxy coatings / 2-pack PUR coatings	unsaturated polyester (UPE)	NC coatings	alkyds, long oil	alkyds, medium oil	high-solids industrial systems	polyacrylates, polyurethane	PVC / vinyl	2-pack PUR coatings	2-pack epoxy coatings	baking / stoving enamels	coil coating
coalescents																																
Loxanol® CA 5308	Lusolvan® FBH	dicarbonic acid-diisobutyl ester		□	■	■	■	■		■			■																			
open time prolongers																																
Loxanol® OT 5840	Loxanol® DPN	aqueous dispersion of oleochemical compounds						■																								
Loxanol® OT 5843	Loxanol® 842 DP-3							■																								
Loxanol® OT 5846	Loxanol® 842 DP-6							■																								
Loxanol® OT 5900	Loxanol® P	oleochemical compound						■																								
plasticizers																																
Efka® PL 5381	Dehysol® D 81	epoxidized soy bean oil																					■				■	■	■			
Efka® PL 5382	Dehysol® D 82																						■				■					
Efka® PL 5520	Dehysol® BS 20 N	butylester of a fatty acid mixture																					■				■					
Efka® PL 5544	Dehysol® 344	dimethyl cyclohexyl phthalate																					■				■					
Efka® PL 5590	Dehysol® 190	ester of an aliphatic acid																					■				■					
Efka® PL 5616	Dehysol® B 316	epoxidized linseed oil																					■				■					
Efka® PL 5642	Dehysol® DBS	dibutyl sebacate																					■				■					
Loxanol® PL 5060	Plastilit® 3060	polypropylene glycol alkylphenylether					□	□		■			■																			

The data in the product selector table is a first recommendation. Suitability of a product should always be checked in the actual paint or ink.

■ excellent □ good

Glossary

Formulation Additives by BASF

Glossary (Old product name)

Formulation Additives by BASF