

# Product selection guide

Pigments, pigment preparations, dispersions, resins and additives for the architectural and construction coatings industry by BASF



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# Where performance meets environment

## Advanced solutions for architectural and construction coatings

The greatest challenge for architectural and construction coatings today is the demand for products that perform as they need to while meeting increasingly demanding environmental standards. BASF offers the widest available range of products from a single source. Our solutions also meet all relevant regulations, without compromising quality or performance.

### Versatility, functionality, durability

Whether new-build or renovation, commercial, industrial or institutional, the demands are the same: maximum visible and invisible impact and maximum durability with minimum impact on the environment. BASF pigments, dispersions, resins and additives support all application methods, creating the surface effects you need while providing outstanding functional performance and resistance to weathering and color degradation.

### Application-specific solutions for roofing applications

For metal or concrete roofing installations, BASF pigments and dispersions are suitable for all final applications, including special formulations for solar heat management. We also provide high-performance organic and inorganic pigments, as well as pigment preparations in solid or liquid form, covering a wide color palette and providing excellent light and weather fastness. In addition, we offer formulation support for regulatory compliance and product safety, including eco labeling.



### High-performance façade coatings

Given their size and visibility, façades place special demands on coating quality, calling for durability, alkaline resistance, color fastness and longevity. At the same time, they need to have the color flexibility to meet legal demands on building appearance. Our solutions for acrylic or silicone-based façade coatings include dispersions, additives, organic and inorganic pigments and pigment preparations.

### Specialist products for interior finishes

Inside the building, interior wall coatings are subject to hard wear as well as needing to provide consistent coloration, resistance and durability across a variety of substrates, including plaster, concrete, wallpaper and wood. In addition to products for application-specific coatings, we specialize in helping to create interesting tactile effects while increasing overall wear resistance and light fastness.

### Adding the finishing touches

In architectural and construction coatings, the details count. This is why you will appreciate our products for enhancing colors, improving water and scratch resistance, offering various design effects and extending durability. For virtually any finished product, from flooring to decking and trimming, we can help bring added value to your coating system.

### Solutions for premium exterior wood coatings

BASF's specialized portfolio of acrylic emulsions enables you to formulate sophisticated coatings for joinery and decorative applications. In addition to our formulation expertise, we have combined our knowledge and experience of the Acronal® range and the RC (rheology controlled) technology of our Joncryl® grades to create a unique technology platform – evidence of BASF's uncompromising dedication to innovation and commitment to quality, service and the environment.

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# Color attracts

## Pigment solutions for a full color spectrum

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BASF offers the world's largest and most diverse portfolio of pigments and pigment preparations for interior and exterior applications.



Our pigments range includes organic, inorganic and effect pigments to support every conceivable type of architectural and construction coating. BASF's organic pigment range is suitable for both interior and exterior applications, while our inorganic range combines high opacity with exceptional durability. We offer powder pigments, liquid preparations such as Luconyl® NG or solid preparations such as Xfast®. These form the basis of most pale-shade exterior coatings and deep-shade interior and exterior coatings. We also offer effect pigments to create unique and individual shades or effects, such as pearlescent, iridescent or metallic finishes

Another example is our Microlith® range of powder pigment preparations. With their very small particle size distribution they are system-specific, making them ideal for water, solvent and UV formulations for wood coatings. Used in combination with effect pigments, they can create stunning decorative effects and also act as a good replacement for organic dyes in applications where high transparency coupled with light fastness and bleed resistance are required.

# Pigments and pigment preparations by BASF

## Explanation of data

### Applications

The applications are divided into interior applications, exterior / façade coatings, silicate / silicone / stucco and wood coatings.

The following icons indicate for which application the individual products are particularly recommended. This indication does not mean that the respective product may not be used for other applications.

-  interior applications
-  exterior / facade coatings
-  silicate / silicone / stucco
-  wood coatings

### Physical data

The physical data range includes information about density (g/cm<sup>3</sup>) and pigment content (in %).

### Performance levels

**Chemical resistance** (alkali resistance, acid resistance)  
Resistance to 2 % HCl and 2 % NaOH was tested in accordance with ISO Gray Scale 105 A02 (1 - 5) for color change (scale: 1 = severe change, 5 = no change).

**Fastness to weathering**  
Full shade, 1/3 standard depth of shade and 1/25 standard depth of shade values for pigment preparations were taken over from weather fastness results of the respective pigments. Color change was evaluated according to the ISO Gray Scale 105 A02 (1 - 5) for color change (scale: 1 = severe change, 5 = no change).

**Reduction ratio**  
Evaluated at 1/3 and 1/25 standard depth of shade. The reduction ratio is evaluated by the FIAF program (DIN 55986). It indicates how many parts of titanium dioxide have to be mixed with 1 part of color pigment to obtain 1/3 or 1/25 standard depth of shade. The higher the reduction ratio the greater the color strength.

**Fastness to light**  
Measured in accordance to ISO/R 105/I; DIN 54003. Panels at full shade and at 75:25 white reduction (TiO<sub>2</sub>) were exposed for 2,000 hours in an Atlas Fade-Ometer.

# Pigments and pigment preparations by BASF

## Product line descriptions

### Cinquasia®

The Cinquasia® range provides high performance organic pigments (HPP) for all industries. Cinquasia® pigments are comprised of a range of Quinacridone-based conventional and solid solutions to enhance further this color space for both opaque and transparent shades. The properties of the pigments within the Cinquasia® are high in order to meet the diverse applications in both water and solvent systems coupled with customer needs for pigments that are used in multiple applications such as deco, coil, powder and automotive fields.

### Cromophtal®

The Cromophtal® range of pigments encompasses Dioxazine and azo condensation pigments. Their application is quite variable from violets in the decorative paint market to high performance reds used in the industrial powder, liquid and coil coating market. Many of the products in this category have links with plastics applications where high temperature stability is required.

### Heliogen®

Phthalocyanine blue and green pigments are renowned for extremely high fastness and strength coupled with outstanding weathering performance. They have been linked with BASF for many decades. The individual pigments were designed to meet customer needs and are available in a wide range of performance properties ranging from very red shade through to green shades and supplied in transparent forms modified to improve dispersibility, flocculation resistance and lower bronzing effects.

### Irgalite®

The Irgalite® range provides a wide range of classical organic pigments serving applications in a broad spectrum of value based applications from Industrial paints for domestic appliances through to interior decorative wall paints. Irgalite® pigments are comprised of a wide range of chemistries including Arylamide, Diarylide, Lake Red C, Bon Arylamide, Azo 2B and 4B Toners.

### Irgazin®

The Irgazin® range provides one of the cornerstones in the range of High Performance organic Pigments (HPP). The product range covers many application fields from automotive through to Industrial liquid and powder coating. The Irgazin® range of pigments are available in a broad color palette which includes reds, yellows, orange and bordeauxs. The Irgazin® pigment portfolio included several chemistry groups and core pigment chemistries of BASF based on DPP, Isoindolinone, Anthraquinone, Perylene, Benzimidazolone and Azomethine Complex pigments.

### Paliogen®

Organic pigments with various chemical compositions and a very high standard of fastness. However their unique shades give rise to individual spot shades used for specialty differentiated shades in the colorist pallet. The range includes opaque and transparent red perylenes as well as indanthrone blue.





### **Paliotan®**

Hybrid pigments containing organic and inorganic components bringing together the high strength and saturation of organic pigments coupled with the high opacity and often very high durability of inorganic pigments. The pigment range was developed to bring together performance linked with viable cost performance levels. The range finds many outlets as a basis for lead free formulation and as base paint options in the decorative field.

### **Paliotol®**

Organic yellow and orange pigments with various chemical compositions. These pigments exhibit high hiding power and good dispersibility. They are very versatile and have a high standard of fastness.

### **Sicopal®**

The range includes a broad color portfolio of inorganic pigments designed to meet the demanding exterior applications within the decorative paint market. The range includes bismuth vanadate for high chroma, high opacity shades and durability.

Orange that represents the ideal shading partner for the redder shade yellow color space with excellent durability and opacity. Blue and green all linked to the final customer needs for color space and high performance.

Black that is part of our cool color approach providing our customers with an alternate means of energy conservation by reduced heat build up in the decorative coating.

### **Sicotan®**

Inorganic mixed-phase pigments with a rutile structure (nickel and chromium titanium yellow). Even in very pale shades, these pigments have an excellent standard of light and weather fastness and are stable to chemicals and are extremely stable to heat finding applications such coil coating. Due to their high performance levels and cost structure this product range forms the basis of many decorative paints that are then modified with organic pigments to enhance hue and chroma.

### **Sicotrans®**

Inorganic pigments with extremely small particle sized iron oxide pigments. The product range contains yellow and red, highly transparent products as well as semi-transparent, easily dispersible grades.

### **Luconyl® NG**

Luconyl®/Luconyl® NG are BASF's trademarks for liquid preparations of organic and inorganic pigments for water-based applications. The ranges consists of a wide range of different pigment chemistries, giving a wide spectrum of applicational properties covering complete colour space. The Luconyl® NG grades offer an extended product offering and state-of-the-art formulation fulfilling legislative requirements.

### **Microlith®**

Microlith® are solid predispersed pigment preparations of various performance organic and inorganic pigments with a very fine particle size and narrow particle size distribution giving unique applicational and aesthetic qualities.

### **Sicoflush®**

Liquid Pigment Preparations for solvent-based Coatings based on carbon black and transparent iron oxide pigments dispersed into 2 carrier mediums allowing for ease of incorporation into the final paint/lacquer.

### **Xfast®**

The Xfast® grades are solid free-flowing, low dusting stir-in-pigments that can be stirred or shaken directly into aqueous coating formulations. Utilising a broad range of pigment chemistries, complete color space is achieved with various performance profiles. Xfast® offers a unique performance in terms of stir-in quality and eliminates many technical issues observed with certain liquid colorants.

# Pigments and pigment preparations by BASF

## Yellow color space

The following pigment and pigment preparations ranges were designed for decorative paint applications and include Quinophthalone yellow a standard in the market for purity in pale shades for maximum color space. The Luconyl® and Xfast® ranges represent the state of the art in liquid and stir in technology for water based emulsion and wood coating systems in line with customer demands and environmental trends. Microlith® and Sicoflush® form the backbone for our decorative wood coating options for enhance color options and improved fastness against the more tradition dye approach without major loss in the key feature of transparency.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>recommended pigment powder products for decorative coatings</b>						
Paliotol® Yellow L 0962 HD		quinophthalone	PY 138		2.02	100 %
Cromophtal® Yellow L 0990	Cromophtal® Yellow 8 GN	azo condensation	PY 128		1.50	100 %
Sicotan® Yellow L 1010		nickel / antimony t-oxide	PY 53		4.50	100 %
Cromophtal® Yellow L 1084 HD	Irgazin® Yellow 2084	benzimidazolone	PY 154		1.59	100 %
Sicopal® Yellow L 1100		bismuth vanadate	PY 184		6.10	100 %
Irgalite® Yellow L 1254 HD	Sico® Yellow FR 1252	arylamide	PY 74		1.50	100 %
Irgalite® Yellow L 1257	Irgalite® Yellow GO	arylamide	PY 74		1.30	100 %
Sicotan® Yellow L 1910		chromium / antimony t-oxide	BR 24		4.42	100 %
Irgazin® Yellow L 2040	Irgazin® Yellow 2 RLT	isoindolinone	PY 110		1.78	100 %
Sicotan® Yellow L 2110		chromium / antimony t-oxide	PB 24		4.30	100 %
<b>powder pigments that find application in decorative coatings</b>						
Irgazin® Yellow L 1030	Irgazin® Yellow 2 GLTE	isoindolinone	PY 109		1.84	100 %
Sicopal® Yellow L 1120		bismuth vanadate	PY 184		5.30	100 %
Irgazin® Yellow K 1740	Irgalite® Yellow B 3 RN	diarylide	PY 83		1.42	100 %
Sicotan® Yellow L 2010		chromium / antimony t-oxide	BR 24		4.40	100 %
Irgazin® Yellow L 2060	Cromphtal® Yellow 3 RLTN	isoindolinone	PY 110		1.78	100 %
Paliotol® Yellow L 2140 HD		isoindoline	PY 139		1.72	100 %
<b>pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings</b>						
Luconyl® NG Yellow 0911		arylamide	PY 3		1.20	43 %
Luconyl® NG Yellow 0962		quinophthalone	PY 138		1.33	50 %
Luconyl® NG Yellow 1256		arylamide	PY 74		1.20	50 %

Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	4 - 5	4	3	1:4.3	1:48.0	NA	semi-transparent		●	●
5	5	4 - 5	4 - 5	4	1:4.5	1:58.0	NA	transparent		●	●
5	5	4 - 5	4 - 5	4 - 5	pure	NA	NA	opaque		●	●
5	5	5	5	4 - 5	1:2.0	NA	NA	semi-transparent		●	●
5	5	4 - 5	4 - 5	4 - 5	1:1.3	1:17.8	NA	opaque		●	●
5	5	4 - 5	4	4	1:1.8	NA	NA	opaque		●	●
5	5	4 - 5	4 - 5	4	1:1.7	1:67.0	NA	opaque		●	●
5	5	4 - 5	4 - 5	NA	1:0.3	1:6.4	NA	opaque		●	●
5	5	3 - 4	4	4 - 5	1:4.4	1:63.0	NA	semi-transparent		●	●
5	5	4 - 5	4 - 5	4 - 5	NA	1:4.9	NA	opaque		●	●
5	5	3 - 4	3 - 4	4	1:2.4	1:30.0	NA	opaque		●	●
5	5	4 - 5	4 - 5	4 - 5	1:0.9	NA	NA	opaque		●	●
5	4	3 - 4	1 - 2	2 - 3	NA	NA	NA	semi-transparent		●	●
5	5	4 - 5	4 - 5	4 - 5	1:0.3	NA	NA	opaque		●	●
5	5	3 - 4	4 - 5	4 - 5	1:2.7	1:38.0	NA	semi-transparent		●	●
5	5	4	4	3 - 4	1:3.30	1:46.5	NA	opaque		●	●
5	5	4	2 - 3	2	1:7.0	1:110.0	NA	semi-transparent		●	
5	5	4 - 5	4	3	1:6.0	1:82.0	NA	transparent		●	
5	5	4 - 5	2 - 3	2	1:6.0	1:85.0	NA	opaque		●	



interior applications



exterior/facade coatings



silicate/silicone/stucco

# Pigments and pigment preparations by BASF

## Yellow color space

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
Luconyl® NG Yellow 1102		bismuth vanadate	PY 184		1.76	50 %
Luconyl® NG Yellow 1260		benzimidazolone	PY 154		1.18	32 %
Luconyl® NG Yellow 1916		iron oxide hydrate, transparent	PY 42		1.47	38 %
Luconyl® NG Yellow 1990		iron oxide hydrate	PY 42		1.90	60 %
Luconyl® NG Yellow 2350		isoindolinone	PY 110		1.23	40 %

### pigment preparations, dry powder pigments used for inplant and point of sale applications - the stir in and go option

Xfast® Yellow 0962		quinophthalone	PY 138		1.80	85 %
Xfast® Yellow 1102		bismuth vanadate	PY 184		4.70	80 %
Xfast® Yellow 1256		arylamide	PY 74		1.40	75 %
Xfast® Yellow 1916		iron oxide hydrate, transparent	PY 42		2.80	60 %
Xfast® Yellow 1990		iron oxide hydrate	PY 42		3.50	80 %

### pigment preparation, liquid dispersion based on a broadly compatible aldehyde resin

Sicoflush® P Yellow 1916		iron oxide hydrate, transparent	PY 42		1.30	35 %
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### pigment preparation, liquid dispersion based on a broadly compatible long oil alkyd resin

Sicoflush® L Yellow 1916		iron oxide hydrate, transparent	PY 42		1.40	45 %
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### specialty pigment preparation, predispersed powder dispersions based on specific carrier resins

Microlith® Yellow 1040 A	Microlith® Yellow 4G-A	azo condensation	PY 93		1.32	52 %
Microlith® Yellow 1040 WA	Microlith® Yellow 3G-WA	azo condensation	PY 93		1.37	50 %
Microlith® Yellow 1105 T	Microlith® Yellow 2G-T	isoindolinone	PY 17		1.20	38 %
Microlith® Yellow 1550 A	Microlith® Yellow 2R-A	diarylide	PY 83		1.37	42 %
Microlith® Yellow 1550 WA	Microlith® Yellow 2R-WA	diarylide	PY 83		1.38	57 %
Microlith® Yellow 2040 T	Microlith® Yellow 3R-T	isoindolinone	PY 110		1.30	33 %
Microlith® Yellow 2040 WA	Microlith® Yellow 3R-WA	isoindolinone	PY 110		1.67	58 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	4 - 5	4 - 5	4 - 5	1:2.0	1:24.0	NA	opaque	  	●	
5	5	5	5	5	1:1.6	1:37.0	NA	semi-transparent		●	
5	5	5	5	5	1:1.0	1:1.18	NA	transparent		●	
5	5	5	5	5	1:1.0	1:19.0	NA	opaque	   	●	
5	5	4-5	4-5	4-5	1:2.9	1:79.0	NA	semi-transparent	 	●	
5	5	4 - 5	4	NA	1:5.0	1:80.0	NA	transparent	 	●	
5	5	4 - 5	4 - 5	NA	1:10.0	1:22.0	NA	opaque	 	●	
5	5	4 - 5	2 - 3	NA	1:5.0	1:90.0	NA	opaque	 	●	
5	5	5	5	5	1:1.0	1:16.0	NA	transparent		●	
5	5	5	5	5	1:0.57	1:19.0	NA	opaque	  	●	
5	4	5	5	5	NA	NA	NA	transparent	  		●
5	4	5	5	5	NA	NA	NA	transparent	  		●
5	5	NA	NA	NA	NA	NA	7	transparent	 		●
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	 	●	
5	5	NA	NA	NA	NA	NA	3 - 4	transparent	 		●
5	4	NA	NA	NA	NA	NA	6	transparent	 		●
5	5	NA	NA	NA	NA	NA	7	transparent	 	●	
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  		●
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  	●	

































# Pigments and pigment preparations by BASF

## Orange color space

The orange color space brings flair and enhancement, with our DPP based orange pigments we bring high chroma and strength and couple it with the Sicopal® Orange L 2430 inorganic pigment to bring the optimum in color space coupled with outstanding durability. Our preparation allow the customer the flexibility to use either the conventional powder route or the cleaner and more convenient predispersed approach.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>recommended pigment powder products for decorative coatings</b>						
Sicopal® Orange L 2430		Sn / Zn / Ti oxide	PO 82		4.90	100 %
Irgazin® Orange EH 1287 (L 2985 HD)		diketo-pyrrolo-pyrrole	PO 73		1.21	100 %
Irgazin® Orange L 2990 HD	Irgazin® DPP Orange RA	diketo-pyrrolo-pyrrole	PO 73		1.30	100 %
Irgazin® Orange L 2994 HD	Irgazin® DPP Orange RA (GRT)	diketo-pyrrolo-pyrrole	PO 73		1.30	100 %
<b>powder pigments that find application in decorative coatings</b>						
Irgazin® Orange L 2890 HD	Cromophthal® Orange 2G	isoindolinone	PO 61		1.66	100 %
Irgazin® Orange L 3250 HD	Irgazin® Orange 2037	hybrid	NA		2.70	100 %
<b>pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings</b>						
Luconyl® NG Orange 2400		iron oxide	PY 42		1.90	60 %
Luconyl® NG Orange 2430		Sn / Zn / Ti Oxide	PO 82		1.90	60 %
Luconyl® NG Orange 2930		pyrazolone	PO 67		1.20	42 %
Luconyl® Orange 2990	Unisperse® DPP Orange RA-S2	diketo-pyrrolo-pyrrole	PO 73		1.06	31 %
Luconyl® NG Orange EH 1855 (3100)		diketo-pyrrolo-pyrrole	PO 73		1.13	30 %
Luconyl® NG Orange 3111		naphthol	PO 5		1.12	30 %
<b>pigment preparations, dry powder pigments used for inplant and point of sale applications - the stir in and go option</b>						
Xfast® Orange 2930		pyrazolone	PO 67		1.60	75 %
Xfast® Orange 3100		diketo-pyrrolo-pyrrole	PO 73		1.50	75 %
<b>pigment preparation, liquid dispersion based on a broadly compatible long oil alkyd resin</b>						
Sicoflush® L Orange 2416		iron [III] oxide / iron oxide hydrate	NA		1.40	40 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	5	5	NA	1:6.6	NA	opaque	  	●	●
5	5	4-5	4-5	4-5	1:2.8	NA	NA	opaque	 	●	●
5	5	4-5	4-5	4-5	1:2.0	NA	NA	semi-transparent	 	●	●
5	5	4-5	4-5	4-5	1:2.0	NA	NA	semi-transparent	 	●	
5	5	4-5	4-5	3-4	NA	NA	NA	semi-transparent	 	●	●
5	5	4	3-4	NA	1:3.6	NA	NA	opaque			●
5	5	5	5	5	1:0.8	1:22.0	NA	opaque	   	●	
5	5	4-5	5	5	1:0.2	1:9.0	NA	opaque	 	●	
5	5	4-5	3	2	1:4.0	1:52.0	NA	semi-transparent		●	
5	5	4-5	4-5	4-5	1:2.1	1:38.0	NA	transparent	 	●	
5	5	4-5	4-5	4-5	1:8.1	1:38.0	NA	semi-transparent		●	
5	3-4	4-5	2-3	2	1:6.0	1:70.0	NA	semi-transparent	 	●	
5	5	4-5	3	2	1:3.0	1:50.0	NA	semi-transparent	 	●	
5	5	5	5	4-5	1:1.7	1:37.0	NA	semi-transparent	  	●	
5	4	5	5	5	NA	NA	NA	semi-transparent	  		●



interior applications



exterior/facade coatings



silicate/silicone/stucco



wood coatings

# Pigments and pigment preparations by BASF

## Red, scarlet and brown color space

The following pigment ranges were designed for paint application and include DPP types for high chrome and high tinting strength especially for the decorative market. Red Azo condensation for mid range durability and strength. BON Arylamides for cost effect deep shade base paints. Iron III Oxide and inorganic pigments that form the basis of cost effective and durable coatings. The portfolio includes many product forms from powder through to predispersed liquids and dispersions – Luconyl® and Xfast®. In addition specialty ranges for solvent and water-based Microlith® predispersed high transparency pigments.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>recommended pigment powder products for decorative coatings</b>						
Irgazin® Scarlet L 3550 HD	Irgazin® DPP Scarlet EK	diketo-pyrrolo-pyrrole	PR 255		1.41	100 %
Irgazin® Red 3600 HD	Irgazin® Red 2031	diketo-pyrrolo-pyrrole	PR 254		1.40	100 %
Irgazin® Red L 3670 HD	Irgazin® Red 2030	diketo-pyrrolo-pyrrole	PR 254		1.65	100 %
<b>powder pigments that find application in decorative coatings</b>						
Sicotrans® Red L 2915 D		iron [III] oxide	PR 101		4.90	100 %
Cromophtal® Scarlet D 3540	Cromophtal® Scarlet RN	azo condensation	PR 166		1.49	100 %
Paliotan® Red L 3745		diketo-poyrrolo-pyrrole based	Hybrid		3.00	100 %
Irgalite® Red L 3855	Sico® Fast Red L 3855	naphthol AS	PR 112		1.49	100 %
Irgalite® Red L 3865	Irgalite® Red 3 RS	naphthol AS	PR 112		1.49	100 %
<b>pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings</b>						
Luconyl® NG Red 2817		iron [III] oxide, transparent	PR 101		1.45	33 %
Luconyl® NG Brown 2915		iron [III] oxide, semi-transparent	PR 101		1.75	50 %
Luconyl® NG Red 3395		iron [III] oxide	PR 101		2.10	60 %
Luconyl® Scarlet 3540	Unisperse® Scarlet R-S	azo condensation	PR 166		1.13	30 %
Luconyl® NG Red 3750		dibromanthranthrone	PR 168		1.30	43 %
Luconyl® NG Red 3855		naphthol AS	PR 112		1.20	42 %
Luconyl® NG Red 3860		diketo-pyrrolo-pyrrole	PR 254		1.20	45 %





Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	4 - 5	4	1:3.8	1:47.0	NA	opaque		●	●
5	5	3 - 4	3 - 4	3	1:5.6	1:75.0	NA	opaque		●	●
4 - 5	5	5	4 - 5	4	1:6.7	1:72.0	NA	opaque		●	●
5	5	5	5	5	1:5.4	NA	NA	semi-transparent		●	●
5	5	4	3 - 4	3 - 4	1:4.9	1:72.0	NA	opaque		●	●
5	5	4 - 5	4 - 5	NA	1:3.6	NA	NA	opaque		●	●
4	5	4	3 - 4	3	1:4.0	1:67.0	NA	opaque		●	●
4	5	4	3 - 4	3	1:4.0	1:67.0	NA	opaque		●	●
5	5	5	5	5	1:5.0	1:50.0	NA	transparent		●	
5	5	5	5	5	1:4.0	1:48.0	NA	semi-transparent		●	
5	5	5	5	5	1:1.0	1:25.0	NA	opaque		●	
5	5	4	3 - 4	3 - 4	1:4.2	1:87.0	NA	opaque		●	
5	5	5	5	5	1:2.2	1:42.0	NA	opaque		●	
4	5	4	3 - 4	3	1:5.0	1:82.0	NA	opaque		●	
4 - 5	5	4 - 5	4	4	1:6.0	1:110.0	NA	opaque		●	

interior applications    
 exterior/facade coatings    
 silicate/silicone/stucco    
 wood coatings

# Pigments and pigment preparations by BASF

## Red, scarlet and brown color space

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>pigment preparations, dry powder pigments used for inplant and point of sale applications - the stir in and go option</b>						
Xfast® Red 2817		iron [III] oxide, transparent	PR 101		3.10	60 %
Xfast® Brown 2915		iron [III] oxide, semi-transparent	PR 101		4.10	80 %
Xfast® Red 3390		iron [III] oxide	PR 101		4.20	80 %
Xfast® Red 3855		naphthol AS	PR 112		1.40	75 %
Xfast® Red 3860		diketo-pyrrolo-pyrrole	PR 254		1.40	80 %
<b>pigment preparation, liquid dispersion based on a broadly compatible aldehyde resin</b>						
Sicoflush® P Red 2817		iron [III] oxide, transparent	PR 101		1.40	35 %
<b>pigment preparation, liquid dispersion based on a broadly compatible long oil alkyd resin</b>						
Sicoflush® L Red 2817		iron [III] oxide, transparent	PR 101		1.40	35 %
<b>specialty pigment preparation, predispersed powder dispersions based on specific carrier resins</b>						
Microlith® Brown 3001 A	Microlith® Brown 5R-A	azo condensation	PBr 23		1.31	45 %
Microlith® Brown 3001 T	Microlith® Brown 5R-T	azo condensation	PBr 23		1.20	30 %
Microlith® Brown 3001 WA	Microlith® Brown 5R-WA	azo condensation	PBr 23		1.40	60 %
Microlith® Scarlet 3430 A	Microlith® Scarlet R-A	azo condensation	PR 166	ethyl cellulose	1.47	59 %
Microlith® Scarlet 3430 T	Microlith® Scarlet R-T	azo condensation	PR 166	modified rosin ester	1.20	33 %
Microlith® Scarlet 3430 WA	Microlith® Scarlet R -WA	azo condensation	PR 166	acrylic	1.37	60 %
Microlith® Red 3630 WA	Microlith® DPP Red B-WA	diketo-pyrrolo-pyrrole	PR 254	acrylic	1.40	50 %
Microlith® Red 3707 WA	Microlith® Red RBS-WA	naphthol AS	PR 23	acrylic	1.30	61 %
Microlith® Red 3785 A	Microlith® Red 2C-A	azo 2B-Toner (Ca)	PR 48:2		1.40	65 %
Microlith® Red 3890 T	Microlith® Red BR-T	azo condensation	PR 144	modified rosin ester	1.25	33 %
Microlith® Red 4035 WA	Microlith® Red 2B-WA	azo condensation	PR 221	acrylic	1.35	58 %

Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	5	5	1:4.0	1:52.0	NA	transparent		•	
5	5	5	5	5	1:3.0	1:45.0	NA	semi-transparent		•	
5	5	5	5	5	1:1.0	1:25.0	NA	opaque		•	
4	5	4	3 - 4	3	1:1.4	1:50.0	NA	opaque		•	
4 - 5	5	4 - 5	4	4	1:6.0	1:110.0	NA	opaque		•	
5	4	5	5	5	NA	NA	NA	transparent			•
5	4	5	5	5	NA	NA	NA	transparent			•
5	5	NA	NA	NA	NA	NA	7	transparent			•
5	5	NA	NA	NA	NA	NA	7	transparent			•
5	5	NA	NA	NA	NA	NA	7	transparent		•	
5	5	NA	NA	NA	NA	NA	7	transparent			•
5	5	NA	NA	NA	NA	NA	7	transparent		•	
5	5	NA	NA	NA	NA	NA	4	transparent		•	
5	5	NA	NA	NA	NA	NA	6	transparent			•
5	5	NA	NA	NA	NA	NA	6	transparent			•
5	5	NA	NA	NA	NA	NA	6 - 7	transparent		•	



interior applications



exterior/facade coatings



silicate/silicone/stucco



wood coatings


























# Pigments and pigment preparations by BASF

## Violet, magenta and rubine color space

Quinacridone pigments form the basis of our portfolio in the Bordeaux color space and provide outstanding durability and chemical stability. Traditional violet color space is maintained by our range of Dioxazine violet designed for customer specific applications in both water- and solvent-based systems.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>recommended pigment powder products for decorative coatings</b>						
Cinquasia® Magenta L 4400	Irgazin® Magenta 2012	quinacridone	PR 282		1.40	100 %
Cinquasia® Violet L 5120	Cinquasia® Violet NRT 201D	quinacridone	PV 19		1.47	100 %
Cromophtal® Violet L 5805	Cromophtal® Violet GA	dioxazine	PV 23		1.50	100 %
<b>powder pigments that find application in decorative coatings</b>						
Cinquasia® Violet L 5110	Cinquasia® Violet R RT 101 D	quinacridone	PV 19		1.48	100 %
Cinquasia® Violet L 5125	Cinquasia® Violet R NRT 887 D	quinacridone	PV 19		1.55	100 %
Cromophtal® Violet L 5800	Cromophtal® Violet GT	dioxazine	PV 23		1.42	100 %
<b>pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings</b>						
Luconyl® Rubine 4025	Unisperse® DPP Rubine TR-S	diketo-pyrrolo-pyrrole	PR 264		1.12	34 %
Luconyl® NG Magenta 4790		quinacridone	PR 122		1.14	35 %
Luconyl® NG Magenta 4791		quinacridone	PR 122 / 282		1.07	15 %
Luconyl® NG Violet 5300		ultramarine	PY 15		1.45	50 %
Luconyl® NG Violet 5890		dioxazine	PV 23		1.06	8 %
Luconyl® NG Violet 5894		dioxazine	PV 23		1.15	35 %
<b>pigment preparations, dry powder pigments used for inplant and point of sale applications - the stir in and go option</b>						
Xfast® Magenta 4790		quinacridone	PR 122		1.40	80 %
Xfast® Violet 5895		dioxazine	PV 23		1.40	80 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	4 - 5	4 - 5	4 - 5	1:5.3	1:73.0	NA	opaque	 	●	●
5	5	5	4 - 5	4 - 5	1:6.0	1:72.0	NA	opaque		●	●
5	5	4 - 5	4 - 5	4	NA	NA	NA	opaque		●	●
5	5	4 - 5	4	4	1:6.1	1:80.0	NA	transparent	 	●	●
5	5	5	4 - 5	4 - 5	1:5.5	1:71.0	NA	opaque	 	●	●
5	5	4 - 5	4	4	1:16.0	1:198.0	NA	opaque		●	●
5	5	5	4-5	4-5	1:6.7	1:131.0	NA	transparent	 	●	
5	5	4 - 5	4 - 5	4	1:5.0	1:80.0	NA	semi-transparent	 	●	
5	5	4 - 5	4 - 5	4 - 5	1:3.8	1:82.0	NA	semi-transparent	 	●	
5	5	5	4 - 5	4 - 5	1:0.04	1:3	NA	opaque	 	●	
5	5	5	4	4 - 5	1:16.0	1:260.0	NA	semi-transparent		●	
5	5	5	4	4 - 5	1:16.0	1:260.0	NA	semi-transparent		●	
5	5	4	4 - 5	4	1:4.0	1:80.0	NA	opaque	  	●	
5	5	5	4	4 - 5	1:15.0	1:260.0	NA	opaque	  	●	

 interior applications     exterior/facade coatings     silicate/silicone/stucco     wood coatings

# Pigments and pigment preparations by BASF

## Blue, green and turquoise color space

The following pigment ranges were designed for paint application and include phthalocyanine blue and green types for high chrome, durability, flocculation resistance and high tinting strength. Ultramarine blue for unique color clean color space, Inorganic Cobalt blue and chromium oxide greens for outstanding durability and chemical fastness to meet customer needs for longer life resistant coatings.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content

### recommended pigment powder products for decorative coatings

Sicopal® Blue L 6210		Co / Al oxide	PB 28		4.00	100 %
Heliogen® Blue L 6875 F		phthalocyanine	PB 15:2		1.54	100 %
Heliogen® Blue L 7085		phthalocyanine	PB 15:3		1.54	100 %
Heliogen® Green L 8730		phthalocyanine	PG 7		2.14	100 %
Heliogen® Green L 8735		phthalocyanine	PG 7		2.14	100 %

### powder pigments that find application in decorative coatings

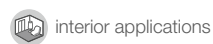
Sicopal® Blue P 6310		Co / Al / Ti oxide	PB 28		4.50	100 %
Heliogen® Blue D 6840		phthalocyanine	PB 15:1		1.61	100 %
Heliogen® Blue L 6905 F		phthalocyanine	PB 15:2		1.66	100 %
Heliogen® Blue L 6975 F		phthalocyanine	PB 15:2		1.67	100 %
Heliogen® Blue L 7087		phthalocyanine	PB 15:3		1.61	100 %
Heliogen® Blue L 7101F		phthalocyanine	PB 15:4		1.64	100 %
Heliogen® Green L 8690		phthalocyanine	PG 7		2.13	100 %
Heliogen® Green L 9361		phthalocyanine	PG 36		2.94	100 %

### pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings

Luconyl® NG Blue 6120		ultramarine	PB 29		1.40	50 %
Luconyl® NG Blue 6310		Co / Al oxide	PB 28		1.80	55 %
Luconyl® NG Blue 6900		phthalocyanine	PB 15:2		1.20	42 %
Luconyl® NG Blue 6901		phthalocyanine	PB 15:2		1.10	20 %
Luconyl® NG Blue 7080		phthalocyanine	PB 15:3		1.20	40 %
Luconyl® NG Green 8730		phthalocyanine	PG 7		1.35	48 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	5	5	1:0.3	NA	NA	opaque		●	●
5	5	5	4 - 5	4 - 5	1:11.0	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:10.4	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:6.1	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:5.8	NA	NA	semi-transparent		●	●
5	5	5	5	5	1:0.3	NA	NA	opaque		●	●
5	5	5	4 - 5	4 - 5	NA	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:12.3	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:12.3	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:11.8	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:10.7	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:5.4	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:4.0	NA	NA	semi-transparent		●	●
5	5	5	4 - 5	4 - 5	1:0.3	1:5.0	NA	opaque		●	●
5	5	5	5	5	1:0.2	1:4.5	NA	opaque		●	●
5	5	5	5	5	1:12.0	1:180.0	NA	transparent		●	●
5	5	5	5	5	1:12.0	1:180.0	NA	transparent		●	●
5	5	5	5	5	1:10.0	1:170.0	NA	transparent		●	●
5	5	5	5	5	1:5.0	1:82.0	NA	transparent		●	●



# Pigments and pigment preparations by BASF

## Blue, green and turquoise color space

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
Luconyl® NG Green 8731		phthalocyanine	PG 7		1.18	25 %
Luconyl® NG Turquoise 9110		Co / Li / Ti Oxide	PG 50		1.85	60 %
Luconyl® NG Green 9360		phthalocyanine	PG 36		1.45	45 %
Luconyl® NG Green 9990		chromium [III] oxide	PG 17		2.25	64 %



































### pigment preparations, dry powder pigments used for implant and point of sale applications - the stir in and go option

Xfast® Blue 6310		Co / Al oxide	PB 28		3.80	80 %
Xfast® Blue 6875		phthalocyanine	PB 15:2		1.40	80 %
Xfast® Blue 7080		phthalocyanine	PB 15:3		1.50	80 %
Xfast® Green 8730		phthalocyanine	PG 7		1.90	80 %
Xfast® Green 9990		chromium [III] oxide	PG 17		4.40	80 %

### specialty pigment preparation, predispersed powder dispersions based on specific carrier resins

Microlith® Blue 6955 T	Microlith® Blue GS-T	phthalocyanine	PB 15:1		1.20	32 %
Microlith® Blue 7080 A	Microlith® Blue 4G-A	phthalocyanine	PB 15:3		1.40	58 %
Microlith® Blue 7080 T	Microlith® Blue 4G-T	phthalocyanine	PB 15:3	modified rosin ester	1.22	34 %
Microlith® Blue 7080 WA	Microlith® Blue 4G-WA	phthalocyanine	PB 15:3	acrylic	1.45	59 %
Microlith® Green 8750 T	Microlith® Green G-T	phthalocyanine	PG 7	modified rosin ester	1.30	33 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	5	5	1:4.0	1:80.0	NA	transparent	 	●	
5	5	5	5	5	1:0.03	1:3.0	NA	opaque	 	●	
5	5	5	5	5	1:4.0	1:60.0	NA	transparent	 	●	●
5	5	5	5	5	1:0.1	1:6.0	NA	opaque	 	●	
5	5	5	5	5	1:0.33	1:5.0	NA	opaque	 	●	
5	5	5	4 - 5	4 - 5	1:45.0	1:146.0	NA	transparent	  	●	
5	5	5	4 - 5	4 - 5	1:7.0	1:160.0	NA	transparent	  	●	
5	5	5	4 - 5	4 - 5	1:4.0	1:80.0	NA	transparent		●	
5	5	5	5	5	1:0.19	1:6.0	NA	opaque	 	●	
5	5	NA	NA	NA	NA	NA	7	transparent	  		●
5	5	NA	NA	NA	NA	NA	7	transparent	  		●
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  		●
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  	●	
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  		●

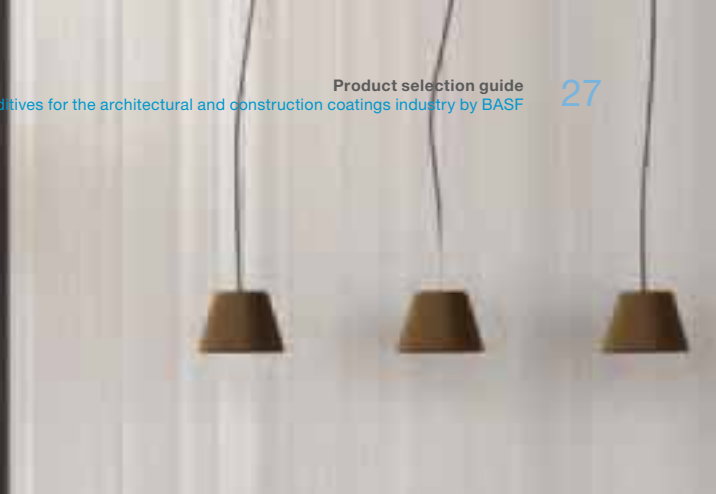
 interior applications     exterior/facade coatings     wood coatings























































# Pigments and pigment preparations by BASF

## White and black color space

Our product portfolio covers both the tradition Carbon black pigments through to high technology IR reflecting organic perylene to inorganic blacks used in heat management and energy conservation.

New product name	Old product name	Chemistry	Colour index	Carrier	Physical data	
					density (g/cm <sup>3</sup> )	pigment content
<b>recommended pigment powder products for decorative coatings</b>						
Sicopal® Black L 0095		Fe / Cr oxide	PBr 29		5.20	100 %
<b>pigment preparations, liquid dispersions for manufacturing VOC free paints for architectural and construction coatings</b>						
Luconyl® NG White 0022		titanium dioxide	PW 6		2.05	63 %
Luconyl® NG Black 0050		iron oxide black	PB 11		1.70	50 %
Luconyl® NG Black 0061		carbon black	PB 7		1.06	8 %
Luconyl® NG Black 0066		carbon black	PB 7		1.25	40 %
Luconyl® NG Black 0095		Fe / Cr oxide	PBr 29		2.28	65 %
<b>pigment preparations, dry powder pigments used for inplant and point of sale applications - the stir in and go option</b>						
Xfast® White 0025		titanium dioxide	PW 6		3.60	85 %
Xfast® Black 0050		iron oxide black	PB 11		3.60	80 %
Xfast® Black 0063		carbon black	PB 7		1.60	70 %
Xfast® Black 0066		carbon black	PB 7		1.70	80 %
Xfast® Black 0095		Fe / Cr oxide	PBr 29		4.30	80 %
<b>specialty pigment preparation, predispersed powder dispersions based on specific carrier resins</b>						
Microlith® White 0022 A	Microlith® White R-A	titanium dioxide	PW 6	ethyl cellulose	3.44	73 %
Microlith® White 0022 WA	Microlith® White R-WA	titanium dioxide	PW 6	acrylic	2.90	80 %
Microlith® Black 0066 A	Microlith® Black C-A	carbon black	PB 7	ethyl cellulose	1.24	56 %
Microlith® Black 0066 T	Microlith® Black C-T	carbon black	PB 7	modified rosin	1.30	33 %
Microlith® Black 0066 WA	Microlith® Black C-WA	carbon black	PB 7	acrylic	1.52	54 %
<b>pigment preparation, liquid dispersion based on a broadly compatible aldehyde resin</b>						
Sicoflush® P Black 0054		carbon black	PB 7		1.10	20 %
<b>pigment preparation, liquid dispersion based on a broadly compatible long oil alkyd resin</b>						
Sicoflush® L Black 0054		carbon black	PB 7		1.10	25 %
Sicoflush® L Black 0063		carbon black	PB 7		1.10	20 %



Performance levels								Opacity	Applications	Recommended for	
alkali resistance	acid resistance	fastness to weathering			reduction ratio		fastness to light			water-based systems	solvent-based systems
		full shade	1/3 ISD	1/25 ISD	1/3 ISD	1/25 ISD					
5	5	5	5	NA	1:0.6	NA	NA	opaque	 	•	•
5	5	5	NA	NA	NA	NA	7 - 8	opaque	   	•	
5	5	5	5	5	1:1.0	1:19.0	7 - 8	opaque	 	•	
5	5	5	5	5	1:11.0	1:144.0	7 - 8	opaque	  	•	
5	5	5	5	5	1:11.0	1:144.0	7 - 8	opaque	  	•	
5	5	5	5	5	1:0.6	1:10.0	7 - 8	opaque	 	•	
5	5	5	NA	NA	NA	NA	7 - 8	opaque	   	•	
5	5	5	5	5	1:1.30	1:19.0	7 - 8	opaque		•	
5	5	5	5	5	1:11.0	1:160.0	NA	opaque	  	•	
5	5	5	5	5	1:11.0	1:155.0	7 - 8	opaque	  	•	
5	5	5	5	5	1:0.6	1:10.0	7 - 8	opaque	  	•	
5	5	NA	NA	NA	NA	NA	7	semi-transparent	  		•
5	5	NA	NA	NA	NA	NA	7 - 8	semi-transparent	  	•	
5	5	NA	NA	NA	NA	NA	7	transparent	  		•
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  		•
5	5	NA	NA	NA	NA	NA	7 - 8	transparent	  	•	
5	5	5	5	5	NA	NA	NA	transparent	  		•
5	5	5	5	5	NA	NA	NA	transparent	  		•
5	5	5	5	5	NA	NA	NA	transparent	  		•


# Effect pigments by BASF for decorative applications

## White, silver and gold color space

BASF's industry-leading portfolio of pigments, pigment preparations and dyes includes special effect pigments that add luster, depth, sparkle, pearlescence and metallic looks to industrial and exterior coatings. Compatible with solvent-, water-based and ultraviolet (UV) light curable coatings, these pigments enable formulators to add multicolor play and other striking visual effects to a wide range of applications to create high visual impact, improve brand recognition and differentiate products.

Product name	Core	Particle size	Pigment content
<b>white/silver color space</b>			
Firemist® Pearl 9G130L	glass	52 - 188 µm	100 %
Firemist® Velvet Pearl EH 921 (9G130L)	glass	5 - 90 µm	100 %
Glacier® Crystal White EH 1030 (9SP130I)	synth. mica	9 - 75 µm	100 %
Glacier® Frost White 9S130D	synth. mica	10 - 48 µm	100 %
Glacier® Sparkle White EH 1060 (9SP130K)	synth. mica	15 - 118 µm	100 %
Magnapearl® 1100	mica	6 - 48 µm	100 %
Magnapearl® 2100	mica	5 - 25 µm	100 %
Magnapearl® 4000	mica	15 - 150 µm	100 %
Mearlin® Super Sparkle 9110S	mica	10 - 150 µm	100 %
<b>gold color space</b>			
Firemist® Gold 9G230L	glass	52 - 188 µm	100 %
Lumina® Brass 9232D	mica	10 - 48 µm	100 %
Lumina® Gold 9Y30D	mica	10 - 48 µm	100 %
Mearlin® Sparkle Brass 9222J	mica	10 - 130 µm	100 %
Mearlin® Sparkle Gold 9220J	mica	10 - 130 µm	100 %
Mearlin® Super Brass 9232Z	mica	6 - 48 µm	100 %
Mearlin® Super Gold 9230Z	mica	6 - 48 µm	100 %
Paliocrom® Gold EH 888 (L 2054)	alu	10 - 38 µm	56 - 60 %



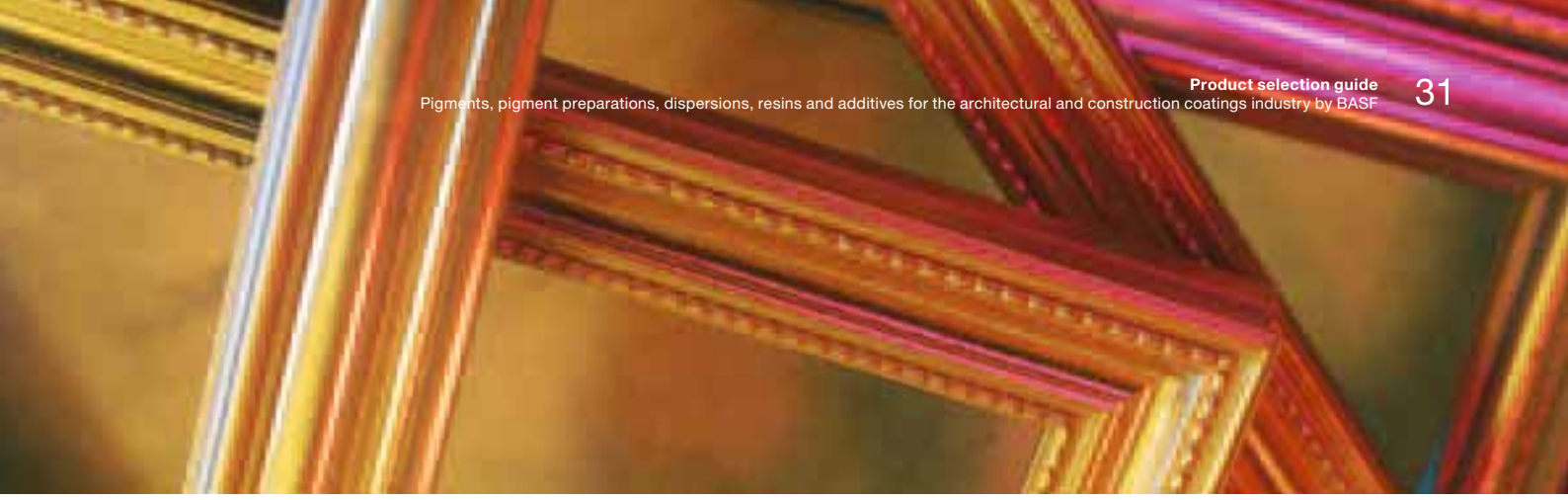
Density	Opacity	Application	Recommended for	
			water-based systems	solvent-based systems
2.56 g/ml	transparent	 	•	•
2.55 g/ml	transparent	 	•	•
3.1 g/ml	transparent	 	•	•
3.0 g/ml	transparent	 	•	•
3.0 g/ml	transparent	 	•	•
3.2 g/ml	transparent	 	•	•
3.2 g/ml	transparent	 	•	•
3.2 g/ml	transparent	 	•	•
2.9 g/ml	transparent	 	•	•
2.56 g/ml	transparent	 	•	•
3.5 g/ml	semi-transparent	 	•	•
3.4 g/ml	transparent	 	•	•
3.1 g/ml	semi-transparent	 	•	•
3.1 g/ml	transparent	 	•	•
3.2 g/ml	semi-transparent	 	•	•
3.2 g/ml	transparent	 	•	•
1.5 g/ml	opaque	 	•	•























 interior applications  wood coatings

# Effect pigments by BASF for decorative applications

## Orange, red, blue, violet and goniochromatic color space

Product name	Core	Particle size	Pigment content
<b>orange color space</b>			
Mearlin® Sparkle Copper 9350J	mica	10 - 130 µm	100 %
Mearlin® Super Bronze 9250Z	mica	6 - 48 µm	100 %
Mearlin® Super Orange 9330Z	mica	6 - 48 µm	100 %
Paliocrom® Orange EH886	alu	10 - 38 µm	60 %
<b>red color space</b>			
Mearlin® Super Russet 9450Z	mica	6 - 48 µm	100 %
<b>blue color space</b>			
Lumina® Royal Aqua 9780H	mica	10 - 48 µm	100 %
Lumina® Royal Blue 9680H	mica	10 - 48 µm	100 %
Mearlin® Sparkle Blue 9620J	mica	10 - 130 µm	100 %
<b>violet color space</b>			
Lumina® Royal Indigo EH 2001 (9580H)	mica	10 - 48 µm	100 %
<b>goniochromatic</b>			
Firemist® Colormotion Blue Topaz 9G680D	glass	13 - 175 µm	100 %
Firemist® Colormotion Ruby 9G480D	glass	13 - 175 µm	100 %



Density	Opacity	Application	Recommended for	
			water-based systems	solvent-based systems
3.1 g/ml	semi-transparent	 	•	•
3.2 g/ml	semi-transparent	 	•	•
3.2 g/ml	semi-transparent	 	•	•
1.4 g/ml	opaque	 	•	
3.4 g/ml	semi-transparent	 	•	•
2.9 g/ml	transparent	 	•	•
2.8 g/ml	transparent	 	•	•
3.1 g/ml	transparent	 	•	•
2.9 g/ml	transparent	 	•	•
27 lbs/ft³	transparent	 	•	•
30 lbs/ft³	transparent	 	•	•

 interior applications     wood coatings

# Dispersions by BASF – performance loves sustainability

The Joncryl<sup>®</sup>, Luhydran<sup>®</sup> and Acronal<sup>®</sup> product families are water-based state-of-the-art solutions that work in a variety of decorative coatings applications. They offer outstanding formulation latitude and enable our customers to successfully differentiate in their markets. Paints based on COL.9<sup>®</sup> keep facades looking fresher for longer, while AQAGloss<sup>®</sup> technology by BASF offers alkyd-like features with outstanding durability for trimpaints and wood coatings; combining both innovative technology and environmental friendliness.

## Wood Paints

State of the art solutions to protect one of the most beautiful substrates.

As your partner in wood, we support you to overcome the challenges in formulating advanced exterior wood coatings. We believe that innovative solutions are inspired by the exchange of ideas and information. Whatever your needs are, you can rely on our proven expertise in polymer technology and colloids, our formulation guidance, our application assistance, our expertise in testing and our passion to protect the natural beauty of wood. You can choose from our comprehensive and environmentally advanced portfolio of binders that suit the various requirements of exterior wood coatings – for decorative, joinery and trim paints applications alike.

## Exterior Paints

One of a kind products that make our world more colourful. Exterior paints need specific properties to be resistant enough through time and to cope with highly demanding weather conditions. BASF's range of dispersions allow coatings formulators to develop high-class paints that will keep their initial quality level. Textured coatings are used to get a decorative structure on interior or exterior walls. Especially exterior textured finishes have a high resistance against the impact of water and staining materials and an excellent adhesion to the different substrates they are applied on. Straight acrylic binders have inherent durability property that is reinforced by their excellent adhesion properties. Despite bad weather conditions and daily moisture exposure, paints formulated with our range of binders will maintain excellent film adhesion & flexibility and provide outstanding durability.

## Interior Paints

Depending on the surfaces they are applied on, interior paints have to possess certain specific performance such as good pigment binding capacity to ensure a high quality final result. Other properties required are a very low VOC content and resistance against household stains. BASF's range of dispersions helps formulators to develop high-quality coatings which keep a decent aesthetic look over time. Low-odor and low-VOC paints support the compliance with environmental requirements and are highly recommended for interior applications.

## Elastomeric Paints

Flexibility at low temperatures. Excellent Dirt Pick Up. Adhesion to challenging surfaces and substrates. Our binders have what it takes.

Elastomeric coatings are a good choice as exterior coatings for facades and roofs. Due to the elasticity they can compensate thermal movements of small cracks and therefore protect the wall against rain, humidity and weathering conditions. Crack formation especially at very low temperatures in winter is avoided by the elasticity of the binder. A second effect is the maintaining of good visual aesthetics in long lasting protective systems.





# Dispersions by BASF

## Explanation of data

### Applications

The applications are divided into interior applications, exterior / façade coatings, silicate / silicone / stucco and wood coatings.

The following icons indicate for which application the individual products are particularly recommended. This indication does not mean that the respective product may not be used for other applications.



interior applications



exterior / façade coatings



silicate / silicone / stucco



wood coatings

### Acronal® ECO

Sustainability is not a trend - it is a matter of course for the majority of premium decorative paints. Our range of solutions offers formulation latitude to create health-friendly paints that can exceed regulatory standards and that are in line with all relevant European eco labels for paints. The possibilities are endless: fresh paints you cannot smell anymore, water-based interior trim paints without solvents, and façade paints that make biocides stay where they belong - within the coating, stopping them from trickling into the soil. Look out for our range of binders tagged with ECO.

### Acronal® PLUS

Additional functionalities in our raw materials offer room for differentiation in the market. They enable formulators to achieve superior properties for numerous segments and applications, be it easy-to-clean surfaces for interior paints, extremely elastic façade paints to bridge cracks in the substrate, or water-based deck stains for terraces that penetrate into the wood more rapidly. Add a PLUS to your recipe by choosing from our range of dedicated products.

### Acronal® EDGE

Set new market standards by using the latest technologies. Our EDGE products enable you to formulate premium paints with superior performance that increase renovation cycles for exterior façades and remain as bright and shiny as on the first day. Warranties of transparent coating systems for wooden doors and windows can be extended to (up to) 10 years. Cutting edge formulation know-how and expertise in tailoring raw materials take your best-in-class recipes to the next level.

# Dispersions by BASF

## Product line descriptions



### Styrene and pure acrylics

Styrene and pure acrylics come with a very high durability against the influence of weathering, which is very important for exterior applications.

Styrene has an outstanding chemical resistance, again a property very important for exterior applications. Through careful selection of the type and quantity of the individual building blocks it is possible to produce polymer dispersions with a broad variety of properties. This enables BASF to cover with pure acrylics, styrene-acrylics and hybrid technologies a variety of applications in the field of Architectural Coatings.

### RC-technology

RC-technology makes use of protective colloids for stabilization of polymer dispersions, enabling finer particle sizes at lower surfactant levels and viscosities in comparison to traditional surfactant-stabilized polymer dispersions. The protective colloid comes with a controlled molecular weight, is an integral part of the binder and may provide additional functionality (e.g. wet adhesion, block resistance, etc.)

# Dispersions by BASF

## Styrene acrylics

Productname	Data							Detailed information
	solids content (%) +/- 1	pH value	viscosity (mPa·s) DIN EN ISO 3219 (23 °C, 100 1/s)	particle size*4 (µm)	MFFT*4 (°C)	stress at break at 23 °C*4 (N/mm <sup>2</sup> )	elongation at break at 23 °C*4 (%)	advantages
<b>styrene acrylics</b>								
Acronal® 290 D/296 D	50	7.5 - 9.0	700 - 1,500	0.1	20	7	500	broad formulation latitude, exceptional cost performance
Acronal® 567 D	50	7.5 - 9	700 - 1,700	0.1	< 1	2	< 1,500	excellent cost performance, good flexibility down to - 5° C (Tg - 5° C), good adhesion to critical substrates
Acronal® ECO 6258	50	7.5 - 8.5	20 - 200	0.15	3	3	1000	low odor, low VOC, broad formulation latitude, good dirt pick-up resistance (UV-crosslinking), ammonia-free, APEO-free
Acronal® S 559	50	6.0 - 7.5	70 - 400	0.15	3	3	800	low odor, low VOC, broad formulation latitude, outstanding waterglass compatibility, ammonia-free, APEO-free
Acronal® S 562	50	7.0 - 8.5	400 - 1,200	0.12	< 1	2	> 1,100	excellent cost performance, good flexibility down to - 5° C (Tg - 8° C), good dirt pick-up resistance, (UV-crosslinking), low water sensitivity, APEO-free, former Acronal® DS 6252
Acronal® S 589	52	6.5 - 8.0	80 - 300	0.15	1	5	700	low odor, low VOC, low surface tack, ammonia-free, APEO-free; can be used for tannin and nicotine blocking primers; suitable for wet room paints
Acronal® S 716	50	6.5 - 8.5	300 - 1,000	0.15	22	7	500	broad formulation latitude, ammonia-free, APEO-free
Acronal® PLUS 727	45	9.0 - 11.0	20 - 100	0.1	7	12	280	excellent tannin and nicotine blocking; APEO-free state-of-the-art primer for exterior wood coating solutions for Deco and Joinery
Acronal® S 790	50	7.5 - 9.0	700 - 1,500	0.1	20	10	400	broad formulation latitude, exceptional cost performance, APEO-free version of Acronal® 290 D
Acronal® S 813	50	7.6 - 8.2	100 - 250 <sup>2</sup>	0.1	28	5	450	excellent wet scrub resistance and superior adhesion properties on mineral substrates (also ceramic tiles), with siloxane-functionality, very good water resistance, APEO-free



Detailed application area														Applications	
exterior paints	textured finishes	concrete protection coatings	exterior insulation and finishing systems EIFS	floor coatings	interior paints	flexible paints	wood paints	wood stains	gloss and satin latex paints	primers	tinters and deep-tone paints	silicate emulsion paints	corrosion protection		joinery coatings
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■ very suitable   
  suitable   
 interior applications   
 exterior/facade coatings   
 silicate/silicone/stucco   
 wood coatings

# Dispersions by BASF

## Hybrid technologies and RC Technology

Productname	Data							Detailed information
	solids content (%) +/- 1	pH value	viscosity (mPa·s) DIN EN ISO 3219 (23 °C, 100 1/s)	particle size <sup>4</sup> (µm)	MFFT <sup>4</sup> (C°)	stress at break at 23 °C/4 (N/mm <sup>2</sup> )	elongation at break at 23 °C/4 (%)	advantages
<b>hybrid technologies</b>								
AQAGloss® (Acrylic/Alkyd Hybrid)	42	7 - 8.5	40 - 300	0.1	< 1	3	250	water-borne, environmentally friendly binder with alkyd like features, superior gloss and good gloss retention, excellent exterior durability, suitable for direct-to-metal applications, no siccation needed, APEO-free
<b>RC technology</b>								
Acronal® EDGE 6283	42.5	7.5 - 9.0	100 - 600	0.06	< 3	10	100	excellent solution for transparent and opaque systems; superior durability on wood combined with an outstanding blocking resistance at low coalescent demand; high elasticity at low temperatures, very good adhesion; good water barrier properties without compromising on breathability
Joncryl® 2560	48	7.9	600 <sup>4</sup>	0.08	< 5	5	200	broad formulation latitude, excellent elasticity and outdoor durability, high gloss level, blocking resistance, reduces coalescent demand and mud-cracking, APEO-free
Joncryl® 8280	46	8.3	200 <sup>4</sup>	0.07	20	9	110	broad formulation latitude, improves gloss level, very good durability on wood, APEO-free
Joncryl® 8284	40	9.0	120 <sup>4</sup>	0.07	< 0	7	200	excellent tannin blocking, very good interaction with associative thickeners, APEO-free
Joncryl® 8383	40	8.1	80 <sup>4</sup>	0.07	16	15	80	broad formulation latitude, excellent balance of surface hardness, blocking resistance and durability on wood, superior wet adhesion, very good water and blushing resistance, ease of defoaming, APEO-free
Joncryl® 8386	40	8.0	75 <sup>4</sup>	0.08	< 5	13	90	broad formulation latitude, exceptional blocking resistance and wet adhesion, outstanding water and blushing resistance, very good durability on wood, ease of defoaming, APEO-free



Detailed application area														Applications	
exterior paints	textured finishes	concrete protection coatings	exterior insulation and finishing systems EIFS	floor coatings	interior paints	flexible paints	wood paints	wood stains	gloss and satin latex paints	primers	tinters and deep-tone paints	silicate emulsion paints	corrosion protection		joinery coatings
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■ very suitable   □ suitable   exterior/facade coatings   wood coatings

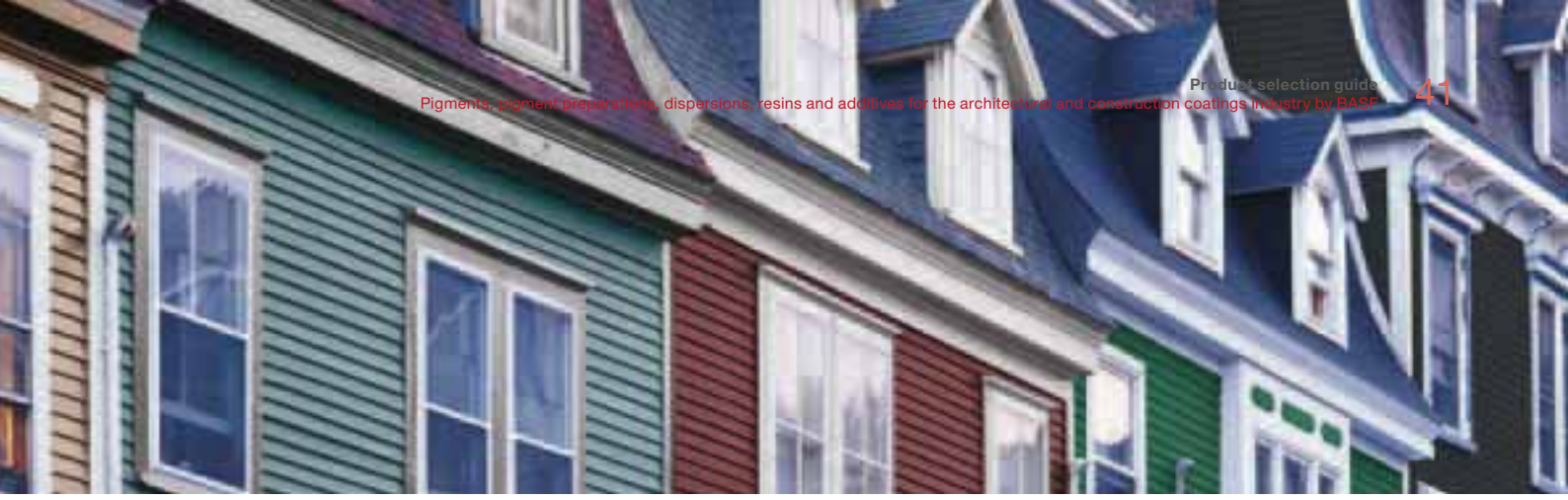
# Dispersions by BASF

## Pure acrylics

Productname	Data							Detailed information
	solids content (%) +/- 1	pH value	viscosity (mPa·s) DIN EN ISO 3219 (23 °C, 100 1/s)	particle size <sup>4</sup> (µm)	MFFT <sup>4</sup> (C°)	stress at break at 23 °C <sup>4</sup> (N/mm <sup>2</sup> )	elongation at break at 23 °C <sup>4</sup> (%)	advantages
Acronal® ECO 6280	47.5	7.0 - 8.5	50 - 400	0.1	2	10	300	environmentally advanced health-friendly low-odor emulsion paints with good wet adhesion for indoor ceilings, walls, mouldings and panels; excellent wet adhesion, broad formulation latitude (low to high PVC), excellent hiding power, high pigment binding power, low odor, low VOC
Acronal® PLUS 6282	48	7.0 - 8.5	50 - 500	0.15	2	5	700	for environmentally advanced matt paints with outstanding resistance against both hydrophobic and hydrophilic stains; extremely low odor, low VOC, ammonia-free, APEO-free
Acronal® PLUS 6288	44	7.5 - 8.5	50 - 400	0.08	< 5	8	220	very fine-sized, multiphase binder with a tailor-made morphology, a special wet adhesion promotor and an optimized stabilization package; specific solution for clear and semitransparent stains for wooden decks, impregnations and low to high build stains
Acronal® 6312	45	7.0 - 8.0	50 - 200	0.1	> 50	-	-	hard modifier for exterior joinery; excellent blend partner to improve hardness, scratch resistance and hot blocking behavior of Acronal® EDGE 6283 and Acronal® LR 9014
Acronal® EDGE 6295	49	7.5 - 8.5	50 - 400	0.13	22	15	200	acrylic binder leading to outstanding color retention and excellent exterior durability; very good hydrophobicity, broad formulation latitude, APEO-free
Acronal® A 508	41	7.5 - 8.5	50 - 200 <sup>2</sup>	0.07	< 3	-	-	exceptional penetration and wetting properties for wood and mineral substrates, APEO-free
Acronal® A 509	50	7.5 - 9.5	200 - 700 <sup>2</sup>	0.1	5	3	700	excellent weathering resistance and cost performance
Acronal® A 684	50	7.5 - 9.0	100 - 400	0.1	17	12	250	broad formulation latitude, excellent wet adhesion properties, APEO-free
Acronal® A 706	48	8.0 - 9.5	80 - 190	0.2	24	8	50	superior abrasion resistance, excellent exterior durability, low water uptake and water whitening, very good resistance against chemicals, fuel and oil, good surface hardness, self-crosslinking
Acronal® A 754	48	7.5-8.5	200 - 900	0.1	17	12	200	outstanding blushing resistance, excellent hydrophobicity, for colored aggregates, APEO-free
Acronal® PLUS 6257	60	7.0 - 8.5	40 - 200 <sup>2</sup>	0.25	< 1	0.6	1,500	outstanding elasticity down to - 20 °C, good dirt pick-up resistance (double crosslinking), excellent water protection at good water vapor permeability, ammonia-free, APEO-free

### pure acrylics





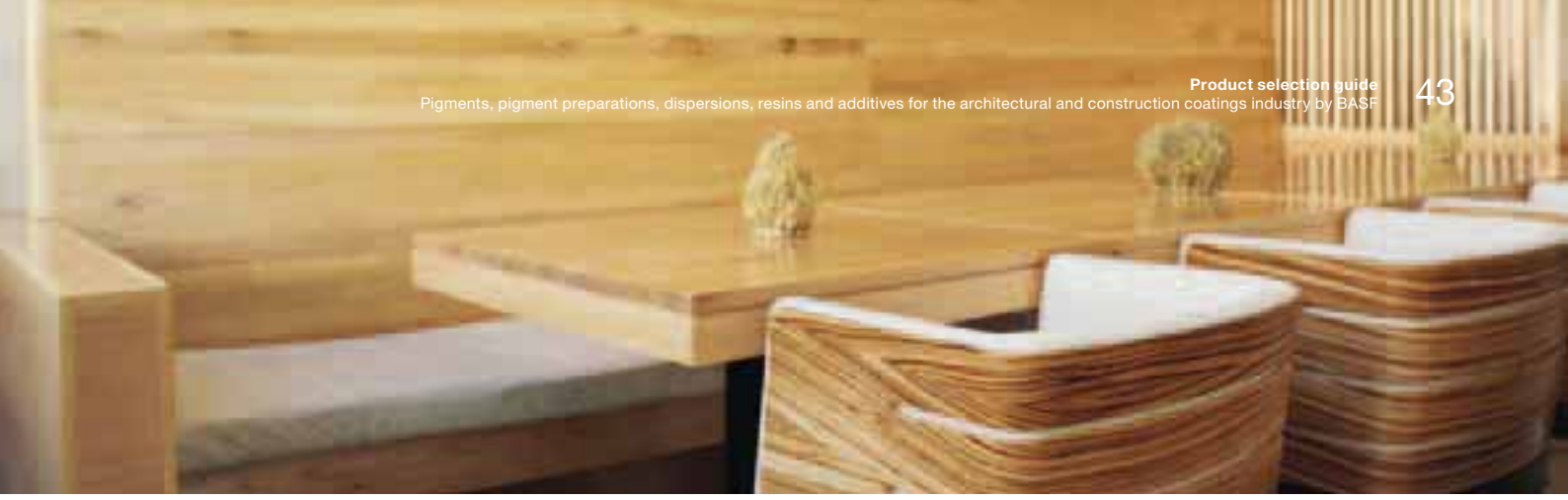
Detailed application area														Applications	
exterior paints	textured finishes	concrete protection coatings	exterior insulation and finishing systems EIFS	floor coatings	interior paints	flexible paints	wood paints	wood stains	gloss and satin latex paints	primers	tinters and deep-tone paints	silicate emulsion paints	corrosion protection		joinery coatings
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■ very suitable    □ suitable    interior applications    exterior/facade coatings    wood coatings

# Dispersions by BASF

## Pure acrylics

Productname	Data							Detailed information
	solids content (%) +/- 1	pH value	viscosity (mPa·s) DIN EN ISO 3219 (23 °C, 100 1/s)	particle size <sup>4</sup> (µm)	MFFT <sup>4</sup> (°C)	stress at break at 23 °C <sup>4</sup> (N/mm <sup>2</sup> )	elongation at break at 23 °C <sup>4</sup> (%)	advantages
<b>pure acrylics</b>								
Acronal® DS 6262	50	7.5 - 8.5	30 - 200	0.2	14	16	100	superior abrasion resistance, excellent exterior durability, low water uptake and water whitening, very good resistance against chemicals, fuel and oil, self-crosslinking, APEO-free
Acronal® DS 6266	48	7.5-8.5	80 - 500	0.1	14	10	350	superior weathering resistance, excellent blushing resistance, tack-free films, also for colored aggregates, APEO-free
Acronal® ECO 6270	50	7.0-8.5	50 - 500	0.1	2	5	650	low odor, low VOC, excellent weathering resistance, high pigment binding power, for low emission paints, ammonia-free, APEO-free
Acronal® DS 6275	46	7.0 - 8.5	20 - 150	0.1	21	15	200	enhanced open time, superior gloss levels; in- and outdoor use, multi-substrate compatibility; excellent weathering performance; APEO-free
Acronal® DS 6277	47.5	7.5 - 9.0	100 - 450	0.09	< 3	6	350	exceptional outdoor durability and film elasticity together with outstanding water barrier properties (EN 927-5), blocking resistance and wet adhesion, APEO-free
Acronal® LR 8960	50	7.5-9.0	100 - 300	0.1	< 1	6	300	excellent outdoor durability on wood, good blocking resistance, wet adhesion, APEO-free
Acronal® LR 9014	45	7.5 - 8.5	100 - 400	0.08	< 3	8.5	110	broad formulation latitude, very good blocking resistance, very good durability, very good wet adhesion, excellent blushing and alkaline resistance, excellent stain resistance, APEO-free
Luhdran® A 848 S	44.5	6.5 - 7.5	150 - 250 <sup>2</sup>	0.07	39	-	-	outstanding surface hardness, excellent resistance to water and blushing, superior resistance to household chemicals, self-crosslinking, APEO-free

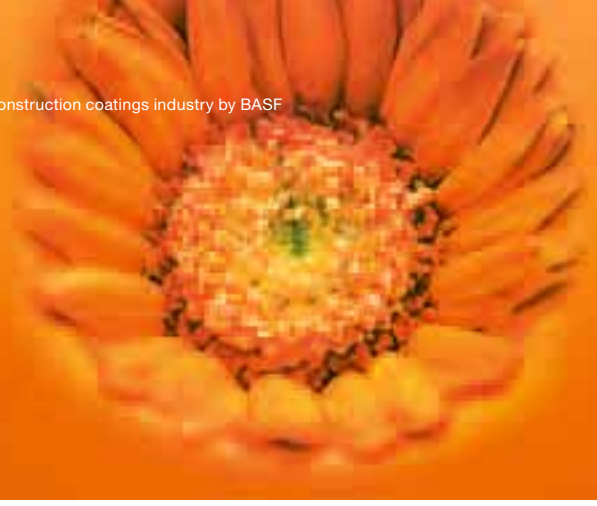


Detailed application area														Applications	
exterior paints	textured finishes	concrete protection coatings	exterior insulation and finishing systems EIFS	floor coatings	interior paints	flexible paints	wood paints	wood stains	gloss and satin latex paints	primers	tinters and deep-tone paints	silicate emulsion paints	corrosion protection		joinery coatings
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■ very suitable    □ suitable     interior applications     exterior/facade coatings     wood coatings

# Additives by BASF

Improved performance with right additives



At BASF, we offer a comprehensive portfolio of formulation additives for architectural coatings. Our industry-leading offer comprises a strong selection of dispersing agents, defoamers, rheology modifiers, wetting and surface modifiers and film-forming agents. These unique products help enable performance-driven products which meet the latest and most stringent environmental regulations.

## Our brands

	Water-based formulations	Non-aqueous formulations
Dispersing agents	Dispex® / Dispex® Ultra	Efka®
Defoamers	Foamaster® / FoamStar®	Efka®
Rheology modifiers	Rheovis® (organic)	Efka®
Wetting and surface modifiers	Hydropalat®	Efka®
Film-forming agents	Loxanol®	Efka®

Our brand names offer dedicated solutions for either water-based or non-aqueous-based applications. All non-aqueous system solutions are marketed under the strong Efka® brand. On the water-based side, multiple well-established brands (Dispex®, Hydropalat®, Foamaster®, Rheovis® and Loxanol®) represent our broad set of offerings. For certain product groups, we further differentiate products and their specifics via second dedicated brand names (Dispex Ultra® and FoamStar®).

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

# Additives by BASF

## Explanation of data

### Acid number

The acid number is determined by potentiometric titration with potassium hydroxide according to ISO 660. The value is given in mg KOH/g substance necessary for neutralization of the substance.

### Amine number

The amine number is determined by potentiometric titration with acid according to DIN 53176. It can be done in aqueous media with water soluble amines or in acetic acid as solvent for water insoluble amines. The amount of acid used is stoichiometrically converted to the equivalent amount of Potassium hydroxide. The value is given in mg KOH/g substance.

### Iodine number

The Iodine number is an indication of the content of carbon/carbon double bonds in a substance and is defined as the amount of Iodine per 100 g of substance which can be chemically added to the double bond. The measurement is carried out according to ISO 3961.

### Oxirane content

The oxirane content is the amount of oxirane groups (CHOCH) in grams per 100 g of substance and determined according to the Method of Jay.

### Solid content

Solid content is determined according to ISO 3251 using an oven where the substance is heated in an aluminium pan for a defined time to a defined temperature, normally for 2 hours to 105 °C with or without air circulation. The solid content is normally only determined where volatiles can be expected by the formulation. In other cases it is set to 100 %.

### Recommended for low-VOC systems

Recommended for low-VOC paints and coatings if VOC content < 1 %.

### VOC content

The definition of volatile organic content (VOC) of a substance or paint is given in the European Directive 2004/42/EC ("Deco Paint Directive"). According to this directive all substances with a boiling point below 250 °C, measured at 1013 mbar, are considered VOC. Measurements are done by gas chromatography according to ISO 11890-2.

For products with a VOC level above 15 % the value is based on calculation according to recipe.

### Viscosity

Viscosity is measured according to ISO 6225 with a Brookfield rheometer. The values given in this brochure are given as a rough indication. The precise temperature, spindle and speed is given with the value in the technical data sheet.

# Additives by BASF

## Product line descriptions

### Dispersing agents

Dispersing agents are used to wet and stabilize pigments and other particles within paints and coatings. For formulators they represent an essential component as they provide color strength, gloss, viscosity stability and prevent sedimentation of particles. BASF offers a broad technology portfolio including polymeric, oligomeric and surfactant-based dispersing agents. BASF dispersing agents offer benefits including outstanding viscosity reduction, increased color intensity and hiding power, enhanced gloss, low VOC, APEO-free and improved freeze-thaw stability. Award-winning Controlled Free Radical Polymerization (CFRP) technology allows for higher efficiency and broader compatibility which creates optimal rheology and improved coloristic properties.

### 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. BASF offers a broad selection of defoamer technologies including products based on mineral or native oils as well as specialty-emulsion defoamers, organo-silicone-based and star-polymer defoamers. We focus on establishing a perfect balance between excellent foam suppression, high compatibility, long-term efficiency, easy handling and environmental compliance in form of low VOC, low S-VOC and low odor solutions.

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

### 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. BASF portfolio offers benefits like high efficiency for dosage reduction and universal suitability.

### 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 a high-performing coalescing agent and a complete range of open-time prolongers based on renewable raw materials.



# Additives by BASF

## Dispersing agents

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

New product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	high PVC paints
<b>high-molecular-weight dispersing agents</b>								
Dispex® AA 4040	Dispex® A 40	ammonium polyacrylate polymer	40	-	-	-		□
Dispex® AA 4140	Dispex® N 40	sodium polyacrylate polymer	40	-	-	-		■
Dispex® CX 4231	Ultradispers® AB 30	ammonium polyacrylate (co-)polymer	30	-	-	≤ 1	●	
Dispex® CX 4320	Pigment disperser MD 20	sodium salt of carboxylic acid copolymer	25	-	-	< 0.1	●	■
Dispex® CX 4345	Ultradispers® MD 21	sodium salt of carboxylic acid copolymer	45	-	-	< 0.1	●	■
Dispex® Ultra PX 4575	Dispex Ultra PX 4575	acrylic block polymer made by controlled free radical polymerisation (CFRP)	40	32	-	< 0.1	●	
Efka® PU 4009	Efka® 4009	polyurethane in solvent	60	9	13	40		
Efka® PU 4063	Texaphor® P63	modified polyurethane polymer	45	10	-	55		
Efka® PX 4330	Efka® 4330	acrylic block copolymer made by controlled free radical polymerisation (CFRP)	70	28	-	30		





matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
							water-based systems	solvent-based systems	
□	■	□	□	■		□	●		standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect
■	■	■	■	■		■	●		standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect
□	■	■	■	■			●		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)
■	■	■	■	■		■	●		excellent dispersing performance, improves gloss, improves wet-scrub resistance, improves blocking resistance, excellent ZnO-compatibility
							●		leads to highest wet-scrub resistance, hydrophobic character
		■		■	■	■	●		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
	■	■			■			●	general industrial coatings where cost-effective performance is vital
	■	■			■			●	polymeric dispersing agent for the deflocculation of inorganic and organic pigments in high-quality solvent-based pigment pastes
	■	■			■			●	solvent-based industrial and decorative coatings; excellent (broad compatibility) for industrial colorants (pigment pastes) in combination with grinding resins such as Laropal® A 81

■ very suitable □ suitable

# Additives by BASF

## Dispersing agents

BASF dispersing agents offer benefits including outstanding viscosity reduction, increased color intensity and hiding power, enhanced gloss, low VOC, APEO-free and improved freeze-thaw stability.

New product name	Old product name	Description	Solids (%)	Amine number (mg KOH/g)	Acid value (mg KOH/g)	VOC content (%)	Recommended for low-VOC systems*	high PVC paints
<b>low-molecular-weight dispersing agents mainly designed for water-based systems, surfactant-like types</b>								
Dispex® Ultra FA 4404	Hydropalat® 3204	chelating agent	50	-	-	< 0.1	●	□
Dispex® Ultra FA 4416	Hydropalat® 216	mixture of surfactants	75	-	-	< 2	●	
Dispex® Ultra FA 4420	Efka® 6220	fatty-acid-modified emulsifier (FAME)	100	35	22	< 1	●	
Dispex® Ultra FA 4425	Efka® 6225	fatty-acid-modified emulsifier (FAME)	100	47	46	< 1	●	
Dispex® Ultra FA 4480	Hydropalat® 1080	modified fatty alcohol ethoxylate	80	-	-	< 0.1	●	
Dispex® Ultra FA 4483	Hydropalat® 7003	phosphoric acid ester	30	-	25	< 0.1	●	□
<b>low-molecular-weight dispersing agents mainly designed for solvent-based systems, conventional types</b>								
Efka® FA 4600	Texaphor® Special	surface active anionic compounds	35.5	-	-	27.5		
Efka® FA 4601	Texaphor®	blend of fatty alcohol sulfates	47	-	-	~ 16		
Efka® WE 3110	Lumiten® AQA 10	surfactant blend	85	-	-	< 0.1	●	



matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
							water-based systems	solvent-based systems	
■	■	■	■	■	□		●		anionic dispersing agent; excellent liquefying effect in inorganic pigment slurry formulations
	■	■	■			■	●		wetting and dispersing agent for aqueous formulations; suitable for organic and inorganic pigments and pigment concentrates
					■		●	●	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
					■		●	●	dispersing agent for universal decorative colorants for tinting systems; makes colorants with excellent compatibility and stability
					■		●		universal, non-ionic wetting and dispersing agent; powerful alternative to APEOs; improves gloss development, color intensity and color acceptance
■	■	■	□	■	■	■	●		universal, anionic wetting and dispersing agent; especially suitable for inorganic pigment concentrates
							●		anti-settling agent for non-aqueous systems; provides good antisetling properties in polar systems
							●		anti-settling agent for non-aqueous systems; good antisetling properties for medium-polar systems
	□	□	□	■	□	■	●		outstanding stabilization of water in solvent-based systems (e.g., alkyds), improves formulation stability; compatibilizes colorants in water-based base paints

■ very suitable □ suitable

# Additives by BASF

## Defoamers

Broad selection of defoamer technologies including products based on mineral or native oils as well as specialty-emulsion defoamers, organo-silicone-based 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 low VOC, low S-VOC and low odor solutions.

New product name	Old product name	Description	Solids (%)	Incorporation	VOC content (%)	Recommended for low-VOC systems*	high PVC paints
<b>defoamers designed to be used in water-based systems</b>							
Foamaster® MO 2134	Foamaster® 8034	mineral-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	■
Foamaster® MO 2150	Foamaster® 50	mineral-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	■
Foamaster® MO NDW	Foamaster® NDW	mineral-oil-based defoamers	100	at any stage of the production process	< 0.1	●	■
Foamaster® MO NXZ	Foamaster® NXZ	mineral-oil-based defoamers	100	at any stage of the production process	< 0.1	●	■
Foamaster® NO 2306	Foamaster® 306	native-oil-based defoamers	100	at any stage of the production process	< 0.5	●	
Foamaster® WO 2323	Foamaster® 223	white-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	
FoamStar® ED 2521	Dehydran® SE 1	emulsion defoamers	~ 20	grinding stage / let-down	< 0.1	●	■
FoamStar® ED 2522	Dehydran® SE 2	emulsion defoamers	~ 20	at any stage of the production process	< 0.1	●	
FoamStar® ED 2523	FoamStar® ED 2523	emulsion defoamers	27	grinding stage / let-down	< 0.1	●	■
FoamStar® SI 2210	Dehydran® 1620	modified polydimethylsiloxane-based defoamers	100	at any stage of the production process	< 0.5	●	
FoamStar® SI 2216	Dehydran® 1650	modified polydimethylsiloxane-based defoamers	100	grinding stage	< 0.5	●	
FoamStar® SI 2250	Efka® 2550	modified polydimethylsiloxane-based defoamers	100	grinding stage / final production	< 1	●	
Foamaster® NO 2335	Foamaster® 350	native-oil-based defoamers	100	grinding stage / let-down	< 0.1	●	■
FoamStar® ST 2438	FoamStar® A 38	star polymer-based defoamers	100	grinding stage / let-down	< 0.5	●	
<b>defoamers designed to be used in non-aqueous systems</b>							
Efka® PB 2001	Perenol® E 1	solvent-based solution of defoaming substances, silicone-free	26	before or after processing	74	NA	
Efka® PB 2020	Efka® 2020	solvent-based solution of defoaming substances, silicone-free	-	before or after processing	~ 80	NA	
Efka® SI 2040	Efka® 2040	solvent-based solution of defoaming substances with modified silicone compounds	-	final production	> 95	NA	

matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
							water-based systems	solvent-based systems	
■	■	□	□	■		□	●		universal defoamer for aqueous emulsion-based coatings and plasters with outstanding long-term efficiency
■	□			■		■	●		very efficient universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings; exceptional product stability
■	□			■		□	●		universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous paints and coatings; high compatibility - does not cause fish eyes
■	□			■		□	●		universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings and adhesives; good compatibility - does not cause fish eyes
■	■	□	■	■		■	●		universal defoamer free from mineral oil and silicone oil; effectively removes micro-foam
■	■	□	□	■		■	●		effective defoamer specifically designed for emulsion paints
■	■			■		■	●		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
□	■	■	■	■		■	●		high-performance, ultra-low-SVOC silicone emulsion defoamer for premium water-based paints, clear coats and inks; excellent storage stability; extremely low SVOC content
■	■	□	□	■		□	●		ultra-low SVOC, emulsion defoamer for medium to high PVC architectural coatings
□	□	■	■	■		■	●		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
	□	■		□	■	■	●		highly effective defoamer for aqueous pigment concentrates and systems with high surfactant content
	■				■	■	●		water-based coatings and pigment concentrates where high-shear processing or application exists; most effective in the range
■	□		□	■		■	●		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
□	□	■	■	■		■	●		silicone-based defoamer for high-quality water-based paints, delivering excellent long-term persistency and foam knock down
	■	□	■				●		silicone-free air-release agent for non-aqueous coatings such as epoxy, polyurethane or UPE systems
	■	■	□				●		acid-cured and NC-curtain coating systems, unsaturated polyester and gelcoats; broad use silicone-free defoamer
	■	■	□				●		solvent-based industrial and decorative finishes, including roller, brush and airless spray applications

# Additives by BASF

## Rheology modifiers

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 (low VOC, odor, free of APEO and heavy metals).

New product name	Old product name	Description	Solids (%)	Viscosity (mPa.s)	VOC content (%)	Recommended for low-VOC systems*	Tin-free	high PVC paints
Efka® RM 1900	Rilanit® HT Extra	modified hydrogenated castor oil	100	powder	< 0.1	NA	●	
Rheovis® AS 1130	Viscalex® HV 30	non-associative thickener: anionic polyacrylate copolymer (ASE)	30	~ 5	< 0.5		●	■
Rheovis® HS 1162	Rheovis® 162	associative thickener: anionic polyacrylate copolymer, hydrophobically modified (HASE)	35	< 50	< 0.5		●	■
Rheovis® HS 1169	Latekoll® DS 6269	associative thickener: anionic polyacrylate copolymer, hydrophobically modified (HASE)	30	< 50	< 0.1	●	●	□
Rheovis® HS 1212	Rheovis® 112	associative thickener: anionic polyacrylate copolymer, hydrophobically modified (HASE)	40	~ 5	< 0.5		●	■
Rheovis® PE 1330	DSX® 3000	associative thickener: hydrophobic modified polyether (HMPE)	30	~ 4,500	< 0.1	●	●	■
Rheovis® PU 1190	DSX® 3290	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	34	~ 30,000	< 1	●	●	■
Rheovis® PU 1291	DSX® 3801	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	45	~ 3,000	< 0.1	●	●	■
Rheovis® PU 1331	DSX® 3100	associative thickener: hydrophobic modified ethoxylated urethane (HEUR)	18	~ 4,500	< 0.1	●	●	■



matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
							water-based systems	solvent-based systems	
								●	provides excellent sag resistance for non-aqueous formulations; higher emperature stability
□			□	□		■	●		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
□	□	□	■	□		■	●		acrylic thickener with associative and non-associative thickening; thixotropic flow behavior; low water uptake; no impact on wet adhesion even after long water contact
■	■		■	■		■	●		acrylic thickener with associative thickening; low-shear thickener; spray applications; less water uptake; elongation of open time
■	■		■	■		■	●		acrylic thickener with associative thickening; mid-shear thickener; improves flow; excellent efficiency; allround product which can be used in most paints systems
■	■	■	■	■		■	●		excellent high-shear thickener; imparts excellent flow
■	■	■	■	■		■	●		strong low-shear thickener; strong pseudoplasticity
■	■	■	■	■		■	●		next-generation VOC-free mid-shear rheology modifier with excellent ICI thickening and easy handling
■	■	■	■	■		■	●		next-generation high-shear thickener; ultra efficient; best in class ICI performance

■ very suitable □ suitable

# Additives by BASF

## Wetting agents, surface modifiers and film-forming agents

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.

New product name	Old product name	Description	Solids (%)	VOC content (%)	Recommended for low-VOC systems*	high PVC paints	matt / interior	silik / semi-gloss
<b>substrate wetting agents</b>								
Efka® FL 3740	Perenol® F40	polyacrylate	> 95	< 0.5				
Efka® FL 3741	Perenol® F41	polyacrylate	> 95	< 0.5				
Hydropalat® WE 3130	Hydropalat® 140	silicone surfactant	48	52				■

Film-forming agents are used to support the film-forming process of a paint or coating. Within this product group, BASF offers a high-performing coalescing agent and a complete range of open-time prolongers based on renewable raw materials.

New product name	Old product name	Description	Solids (%)	Viscosity (mPa.s)	VOC content (%)	Recommended for low-VOC systems*	Iodine number (g/100g)	Oxirane content (%)
<b>film-forming agents</b>								
Loxanol® CA 5308	Lusolvan® FBH	dicarbonic acid-diisobutyl ester	> 99	~ 6	< 0.1	●		
Loxanol® OT 5840	Loxanol® DPN	aqueous dispersion of oleochemical compounds	20	600	< 0.1	●		
Loxanol® OT 5843	Loxanol® 842 DP-3	aqueous dispersion of oleochemical compounds	30	~ 5,000	< 0.1	●		





gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
					water-based systems	solvent-based systems	
							<ul style="list-style-type: none"> <li>● silicone- and solvent-free flow and leveling agent with air-release properties for non-aqueous coatings</li> </ul>
							<ul style="list-style-type: none"> <li>● silicone- and solvent-free flow and leveling agent with air-release properties; excellent compatibility</li> </ul>
■	■			■	●		high-performance silicone-based wetting agent; strong reduction of static surface tension; excellent compatibility

high PVC paints	matt / interior	silk / semi-gloss	gloss	wood paints and stains	exterior and elastic paints, plasters	colorants	low-VOC	Recommended for		Features and benefits
								water-based systems	solvent-based systems	
	□			□	□		■	●		outstanding coalescing efficiency; improves wet-scrub resistance; mild odor
					■			●		open-time prolonger in liquid form; prevents/reduces cracking in resin-based plasters
					■			●		highly efficient open-time prolonger in paste form for resin-based plasters

■ very suitable □ suitable





