

**BASF**  
We create chemistry

**Making a green wall a clean solution.**  
Transforming needs into solutions for  
Interior Decorative Coatings.

European Coatings Show

Nuremberg, 19-21 March 2019





## The challenge:

Interior paints are something very special. They are where people sleep and often also where they work or play. They have a great influence on our sense of space and well-being. They are used by both professionals and consumers. So, the requirements for interior coatings are correspondingly broad. Here, visual requirements meet application requirements and both must be in harmony with safety and health.

## The mission:

We at BASF are here to support you with our technical expertise and industry know-how, we are constantly working on new solutions and innovations to meet your needs:

Air quality, ease and speed of application, ease to clean, we are prepared so you can perform.

**Let's make a green wall, a green solution.**



**We make today's challenges tomorrow's solutions**

**Titanium Dioxide**    **Indoor Air Quality**    **Blocking stains**  
**Eco-friendly**    **Formaldehyde**    **Anti-allergic**    **Biocides**    **DIY**  
**Easy to apply**    **Decoration**    **Low VOC**    **Ammonia-free**  
**Zinkoxyd**    **MIT free**    **Wet scrub resistance**    **Lean Manufacturing**  
**Eco Labels**    **Biocide free**    **Spattering resistance**  
**Low-odor**    **Wet adhesion**    **Burnish resistance**    **Functional Paints**  
**VAE replacement**    **Total Cost of Formulation**    **Cleanability**

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Explore our solutions that make a green wall a clean solution



# Lab Assistant for Architectural Coatings



A web-based application that makes it easier than ever for you to find BASF products and formulation ideas and use them to create your architectural coatings.





-  Find the right ingredient
-  Get all relevant data
-  Formulate your coating
-  Compare products or formulations
-  Access expert support
-  Order your sample
-  Individualize your own account



# Biomass Balance Approach for Architectural Coatings



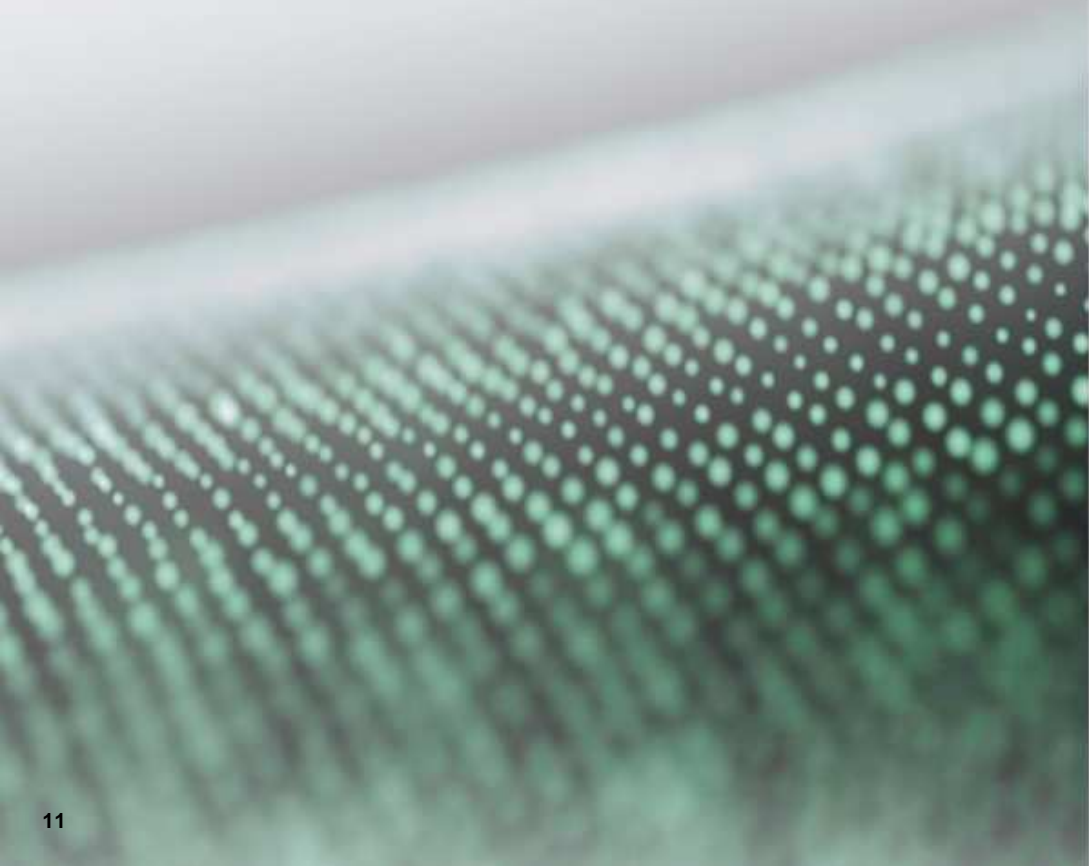
## Save fossil resources and CO<sub>2</sub> emissions

-  Drives the use of sustainable renewable resources
-  Same product performance – no need for reformulation
-  Independently certified by third party
-  Surprise your customers with added ecological benefit of your paint!

All our solutions can be biomass balanced



# Explore dispersions & additives for Interior applications



# Acronal® 6292



Acronal® 6292 is an environmentally advanced aqueous dispersion of a styrene acrylic copolymer.

- Market standard of biocide-free paints
- Excellent paint performance properties: wet scrub resistance, durability, cleanability
- Increased pigment binding enables cost-competitiveness



Application **Healthy Interior Paints**



MFFT (°C) **5**



Recommended for low VOC systems



Viscosity (mPas) **20 - 100**



Particle size (µm) **0.17**



Solids content (%) **50**



pH value **6.5 - 7.5**

Combine Acronal® 6292 with Dispex® CX 4248 to boost efficiency further

See it in action: Modern interior paint



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# Acronal® ECO 6270



Acronal® ECO 6270 is an environmentally advanced aqueous dispersion of a straight acrylic copolymer without compromise.

- Low VOC
- Broad formulation latitude
- Luxury-looking indoor paints



Application **Low-VOC Premium Paints**



MFFT (°C) **2**



Recommended for low VOC systems



Viscosity (mPas) **50-500**



Particle size (µm) **0.1**



Solids content (%) **50**



pH value **7.0-8.5**

Combine Acronal® ECO 6270 with Dispex® CX 4320 and Rheovis® PE 1330 to create a low VOC premium interior paint

See it in action: Low VOC premium interior paint



# Acronal® Plus 6282



Acronal® PLUS 6282 is an environmentally advanced aqueous dispersion of a straight acrylic copolymer for matt paints.

- Outstanding resistance against hydrophilic and hydrophobic stains
- Combines cleanability with dry burnishing resistance



Application **Stain resistant interior paints**



MFFT (°C) **2**



Recommended for low VOC systems



Viscosity (mPas) **50-500**



Particle size (µm) **0.15**



Solids content (%) **48**



pH value **7.0-8.5**

Combine Acronal® Plus 6282 with Dispex® CX 4320 and Rheovis® HS 1212 to create a matt interior paint that is easy to clean

See it in action: Easily cleanable interior paint 



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# Acronal® S 589



Acronal® S 589 is an environmentally advanced aqueous dispersion of a styrene acrylic copolymer.

- Excellent water resistance
- Blocking properties against nicotine and tannins



Application

**Interior paint with blocking properties**



MFFT (°C)

**1**



Recommended for low VOC systems



Viscosity (mPas)

**80-300**



Particle size (µm)

**0.15**



Solids content (%)

**52**



pH value

**6.5-8.0**

Combine Acronal® S 589 with FoamStar® ED 2522 to formulate a low odor tannin blocking primer

See it in action: Low odor tannin blocking primer



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# Acronal® ECO 6380



Acronal® ECO 6380 is an environmentally advanced health-friendly aqueous dispersion of a straight acrylic copolymer

- Excellent wet adhesion
- Blocking resistance
- Anti-allergic paint formulation possible (region specific)



Application **Interior paints (low PVC)**



MFFT (°C) **2**



Recommended for low VOC systems



Viscosity (mPas) **50-400**



Particle size (µm) **0.1**



Solids content (%) **47.5**



pH value **7.0-8.5**

Combine Acronal® ECO 6380 with Dispex® AA 4030 and Rheovis® PE 1330 to formulate an interior paint with good blocking resistance






# Acronal® HIDE 6610

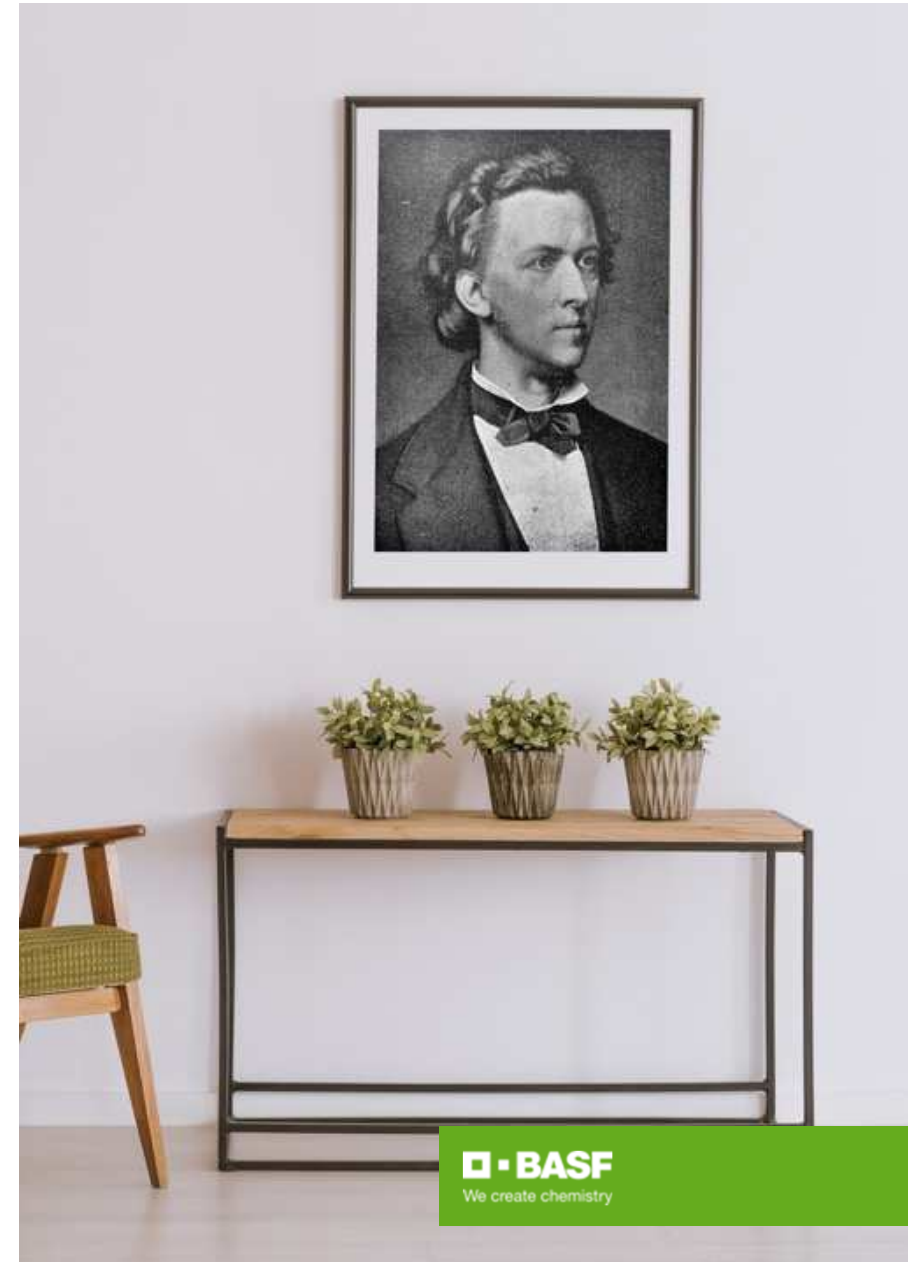


Acronal® HIDE 6610 is a universal pure acrylic binder that optimizes cost of formulation through superior Titanium Dioxide efficiency.

- Coalescent agent is needed to enable film-formation
- Excellent thickener interaction

	Application	<b>Multi-purpose paints</b>		Viscosity (mPas)	<b>100-400</b>
	MFFT (°C)	<b>18</b>		Particle size (µm)	<b>0.1</b>
	pH value	<b>7.5-9.0</b>		Solids content (%)	<b>46</b>

Combine Acronal® HIDE 6610 with Loxanol® CA 5308 and Dispex® AA 4030 to formulate a multi-purpose paint



# Formulation additives: focus products for Interior Premium Paints

## Defoamers

## Dispersing agents

## Rheology modifiers

## Film-forming agents

### Foamaster®

MO 2134  
MO 2150  
MO NDW  
MO NXZ

### FoamStar®

ED 2521  
ED 2523

High molecular  
weight

### Dispex®

AA 4040  
AA 4140  
CX 4248  
CX 4320  
CX 4345

### Dispex Hide®

AA 4545  
CX 4542

Low molecular  
weight

### Dispex Ultra®

FA 4480

### Rheovis®

HS 1152  
HS 1162  
HS 1169  
HS 1212  
PE 1330  
PU 1191  
PU 1291  
PU 1340

### Loxanol®

CA 5308  
CA 5336

# Dispex® CX 4248



## High-performance, polymeric dispersing agent for improved wet scrub resistance and reduction of TiO2

- Allows for reduction of total paints costs through decrease of binder and TiO2 contents while maintaining similar paint properties



Application **High PVC indoor wall paints**



Viscosity (mPas) **~2.000**



VOC Content (%) **<0.1**



Solids content (%) **~25.0**

Combine Dispex® CX 4248 with Acronal® 6292 to boost efficiency in modern interior paints

See it in action: Modern interior paint



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# Dispex® HIDE CX 4542



Dispex® HIDE CX 4542 is an anionic dispersing agent based on polycarboxylic acid which is especially designed to **maximize the utilization of titanium dioxide** in combination with fillers and extenders

- Broad application range
- Excellent interaction with hydrophobic thickeners



Application **Interior Paints**



Viscosity (mPas) **~50**



VOC Content (%) **<0.1**



Solids content (%) **~25.0**

Combine Dispex® HIDE CX 4542 with Acronal® 6292 to optimize interior paint formulations



# Rheovis® PE 1330



Rheovis® PE 1330 is an **excellent newtonian rheology modifier** for aqueous coatings that provides high ICI viscosity.

- Excellent high shear thickener
- Imparts excellent coating build up



Application **Low VOC Interior Paints**



VOC Content (%) <0.1



Viscosity (mPas) **~4.500**



Solids content (%) **30.0**



Tin free



Combine Rheovis® PE 1330 with Acronal® 6292 to optimize paint feel

# FoamStar® ED 2523



## Ultra-low SVOC mid-range emulsion defoamer for medium to high PVC architectural coatings

- Excellent foam suppression in premium flat and semi-gloss paints based on acrylic, styrene acrylic and VAE binder systems
- Excellent long-term stability
- Highly compatible
- No fogging



SVOC (ppm) ~ 2000 acc. to TÜV test (DIN 11890-2)



Viscosity (mPas) ~**2000**



VOC Content (%) <0.1



Solids content (%) ~**27.5**

Combine FoamStar® ED 2523 with Acronal® 6292 to formulate a low VOC premium interior paint



# BASF offers a broad range of MIT-free products for Interior Paints(1)

## BASF Solutions

Product name	Component	Benefits
Acronal® 6292 NB	Dispersion	Outstanding wet scrub resistance, low odor, for low VOC formulations, exceptional cost performance. Market standard for biocide-free paints
Acronal® ECO 6270 NB	Dispersion	Broad formulation latitude for low VOC premium paints
Acronal® Plus 6282 NB	Dispersion	Soft pure acrylic for emission-free premium flat paints with superior cleanability
Acronal® S 589 NB	Dispersion	Excellent film forming properties and hydrophobicity, can be used for tannin- and nicotine-blocking primers, suitable for wet room paints
Acronal® ECO 6380	Dispersion	Excellent wet adhesion, broad formulation latitude, good hiding power, for low VOC formulations, also for anti-allergic paints
Acronal® HIDE 6610 NB	Dispersion	Universal pure acrylic binder that optimizes cost of formulation through superior Titanium Dioxide efficiency

MIT has not been intentionally added

23 NB= current product with new biocide package

# BASF offers a broad range of MIT-free products for Interior Paints(2)

## BASF Solutions

Product name	Component	Benefits
Dispex® AA 4040	Dispersing Agent	Standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect
Dispex® AA 4140	Dispersing Agent	Standard dispersing agent for inorganic fillers and pigments; low polydispersity leading to most efficient dispersing properties and liquefying effect
Dispex® CX 4248	Dispersing Agents	High performance, polymeric dispersing agent for improved wet scrub resistance and reduction of TiO <sub>2</sub>
Dispex® CX 4320	Dispersing Agent	Excellent dispersing performance; improves gloss; improves wet-scrub resistance; improves blocking resistance; excellent ZnO-compatibility
Dispex® HIDE AA 4545	Dispersing Agent	All purpose dispersing agent for TiO <sub>2</sub> , fillers and extenders, enhances opacity, excellent performance in all types of formulations, economical
Dispex® HIDE CX 4542	Dispersing Agent	Hydrophobic dispersing agent for opacity enhancement, helps to reduce water sensitivity, excellent interaction with hydrophobic thickeners

\*MIT has not been intentionally added



# BASF offers a broad range of MIT-free products for Interior Paints(3)

## BASF Solutions

Product name	Component	Benefits
Foamaster® MO 2134	Defoamer	Universal defoamer for aqueous emulsion-based coatings and plasters with outstanding long-term efficiency
Foamaster® MO 2150	Defoamer	Efficient universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings; exceptional product stability
Foamaster® MO NDW	Defoamer	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® NXZ	Defoamer	Universal defoamer for aqueous emulsion-based coatings and plasters; specifically designed for flat aqueous coatings and adhesives; good compatibility– does not cause fish eyes
Loxanol® CA 5308	Coalescent	Highly efficient coalescing agent for interior/exterior paints, elastomeric coatings, textured finishes and wood coatings
Rheovis® PU 1340	Rheology Modifier	Highly effective high-shear rheology modifier for paints and coatings where a Newtonian rheology profile is desired

\*MIT has not been intentionally added

# Ecolabel assessment – Formulation Additives (1)

## BASF Solutions

Product name	EU Ecolabel	Nordic Ecolabel	Blue Angel
	Paints and Varnishes 2014/312/EU	Nordic Swan Indoor Paints and Varnishes Version 3.4, May 18	Low-emission interior wall paints RAL UZ 102 Ver.: Jan 15
Foamaster® MO 2134	Suitable*	Suitable	Suitable
Foamaster® MO 2150	Suitable*	Suitable	Suitable
Foamaster® MO NDW	Suitable	Suitable	Suitable
Foamaster® MO NXZ	Suitable	Suitable	Suitable
FoamStar® ED 2521	Suitable*	Suitable*	
FoamStar® ED 2523	Suitable*	Suitable*	Suitable
Dispex® AA 4040	Suitable	Suitable	Suitable
Dispex® AA 4140	Suitable*	Suitable	Suitable
Dispex® CX 4320	Suitable	Suitable	Suitable

\*with restrictions: see/request Ecolabel statement for details

<sup>26</sup> It is recommended to request and check the latest product statement at [ed-psr@basf.com](mailto:ed-psr@basf.com) before using the product in a formulation.

BASF offers a comprehensive Ecolabel assessment for Formulation Additives. Over 100 relevant products have been assessed.

Don't lose time due to missing Ecolabel evaluation. Check the status conveniently on the lab assistant



# Ecolabel assessment – Formulation Additives (2)

## BASF Solutions

Product name	EU Ecolabel	Nordic Ecolabel	Blue Angel
	Paints and Varnishes 2014/312/EU	Nordic Swan Indoor Paints and Varnishes Version 3.4, May 18	Low-emission interior wall paints RAL UZ 102 Ver.: Jan 15
Dispex® CX 4248	Suitable	Not suitable	Suitable
Dispex® CX 4345	Not suitable	Suitable	Not suitable
Dispex® HIDE AA 4545	Suitable	Suitable	Suitable
Dispex® HIDE CX 4542	Suitable	Suitable	Suitable
Dispex® Ultra FA 4480	Suitable*	Suitable*	Suitable
Rheovis® HS 1152	Suitable	Suitable	Suitable
Rheovis® HS 1162	Suitable	Suitable	Suitable
Rheovis® HS 1169	Suitable	Suitable	Suitable

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# Ecolabel assessment – Formulation Additives (3)

## BASF Solutions

Product name	EU Ecolabel	Nordic Ecolabel	Blue Angel
	Paints and Varnishes 2014/312/EU	Nordic Swan Indoor Paints and Varnishes Version 3.4, May 18	Low-emission interior wall paints RAL UZ 102 Ver.: Jan 15
Rheovis® HS 1212	Suitable	Suitable	Suitable
Rheovis® PE 1330	Suitable*	Suitable*	Suitable
Rheovis® PU 1191	Suitable	Suitable	Suitable
Rheovis® PU 1291	Suitable	Suitable	Suitable
Rheovis® PU 1340	Suitable*	Suitable	Suitable
Loxanol® CA 5308	Suitable	Suitable	Not suitable
Loxanol® CA 5336	Suitable	Suitable	Suitable

\*with restrictions: see/request Ecolabel statement for details

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