



Powering Up Your Formulations

Performance & Formulation Additives for
Automotive Coatings



Agenda



- 1** BASF Pioneer in Sustainability
- 2 Sustainability Product Recommendations
- 3 Industry Segments Product Guides
- 4 Highlight Products (Launches)
- 5 Summary

Our large portfolio enables solutions for various industries

Formulation Additives



Dispersing Agents



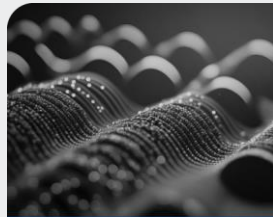
Defoamers



Rheology Modifiers



Wetting Agents & Surface modifiers

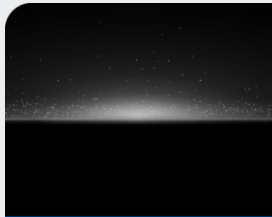


Film-forming Agents

Performance Additives



UV Absorbers
BTZ & HPT



Radical Scavengers



Antioxidants



BASF is the premiere provider of **Performance & Formulation Additives** for the paints and coatings industry



Architectural Coatings



Industrial Coatings



Automotive Coatings



Furniture & Flooring



Adhesives



Construction



Printing & Packaging



Composites

Carbon Management: BASF's path to climate neutrality in 2050

CO₂ reduction



- Reduce the emissions along the value chain
- Derive the PCFs of our products

The Biomass Balance Approach



- Enables carbon footprint reductions
- Without compromising the product's final properties

Sustainable Transport Solutions



- Gaining transparency on transport emissions
- Working with suppliers to achieve measurable improvements

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BASF Pioneer in Sustainability

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Sustainability Product Recommendations

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Industry Segments Product Guides





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Highlight Products (Launches)

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Summary

Sustainability Differentiation – Automotive Coatings

	Dispersing Agents	Defoamers	Rheology Modifiers	Wetting Agents and Surface Modifiers	Light Stabilizers
 Enables water-based	Dispex® Ultra PA 4550 Dispex® Ultra PX 4290 Dispex® Ultra PX 4575 Dispex® Ultra PX 4585 Dispex® Ultra CX 4452	FoamStar® MO 2134 FoamStar® MO 2111 FoamStar® SI 2299 FoamStar® ST 2400 FoamStar® ST 2454 FoamStar® ST 2438	Rheovis® AS 1130 Rheovis® HS 1153 Rheovis® PU 1193 Rheovis® PU 1250	Hydropalat® FL 3635 Hydropalat® WE 3120 Hydropalat® WE 3221 Hydropalat® WE 3323 Hydropalat® WE 3650	Tinuvin® 9945-DW ECO Tinuvin® 400-DW ECO Tinuvin® 477-DW ECO Tinuvin® 479-DW ECO Tinuvin® 123-DW ECO Tinuvin® 249-DW ECO
 Enables 100% systems	Efka® PX 4310 Efka® PX 4320 Efka® PX 4330 Efka® PX 4350 Efka® PX 4733 Efka® PX 4780 Efka® PX 4787	Efka® PB 2770	Efka® RM 1410 Efka® RM 1469 Efka® RM 1920	Efka® FL 3740 Efka® FL 3745 Efka® FL 3750 Efka® SL 3258 Hydropalat® WE 3220	Tinuvin® 405 Tinuvin® 928 Tinuvin® 292 Tinuvin® 123 Tinuvin® 249 Tinuvin® 152
 Efficiency	Efka® PX 4310 Efka® PX 4350 Efka® PX 4787 Dispex® Ultra CX 4452 Dispex® Ultra PA 4550 Dispex® Ultra PX 4585	FoamStar® ST 2438	Rheovis® AS 1130 Efka® RM 1410	Efka® FL 3740 Efka® FL 3745	Tinuvin® 400 Tinuvin® 477 Tinuvin® 479 Tinuvin® 123 Tinuvin® 249 Tinuvin® 152
 Renewables		Efka® PB 2770	Efka® RM 1900 Efka® RM 1920	Hydropalat® WE 3120	Tinuvin® 123 Tinuvin® 292

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Product Portfolio for Automotive Coatings

	Dispersing Agents		Defoamers	Rheology Modifiers	Wetting Agents & Surface Modifiers	Miscellaneous	Light Stabilizers			
	High molecular weight	Low molecular weight					UVA	HALS	DW	Blends
Water-based	Dispex® Ultra PA 4550 PX 4575 PX 4585 PX 4290 PX 4275 CX 4452	Dispex® Ultra FA 4416 FA 4437	FoamStar® MO 2134 MO 2111 SI 2299 ST 2400 ST 2454 ST 2438	Rheovis® AS 1130 HS 1153 PU 1250 PU 1193 Attagel 50	Hydropalat® WE 3120 WE 3220 WE 3221 WE 3323 WE 3650 FL 3635	Loxanol® / Efka® Loxanol PL 5830 Efka PL 5651			Tinuvin® 123-DW ECO 400-DW ECO 479-DW ECO 9945-DW ECO	
Solvent-based	Efka® PA 4401 PU 4061 PU 4063 PX 4310 PX 4320 PX 4330 PX 4350 PX 4753 PX 4780 PX 4787	Efka® FA 4609 FA 4611	Efka® SI 2723 PB 2010 PB 2770	Efka® RM 1469 RM 1920 RM 1410	Efka® FL 3740 FL3745 FL 3750 FL 3755 SL 3288 SL 3030 SL 3035 SL 3236	Efka® Efka IO 6779 Efka IO 6782	Tinuvin® 384-2 400 477 479 928 1130 Carboprotect	Tinuvin® 123 152 292 249	Tinuvin® 5151 5248 5341	

New product

Industrial Coatings Segments & BASF portfolio

Market segments



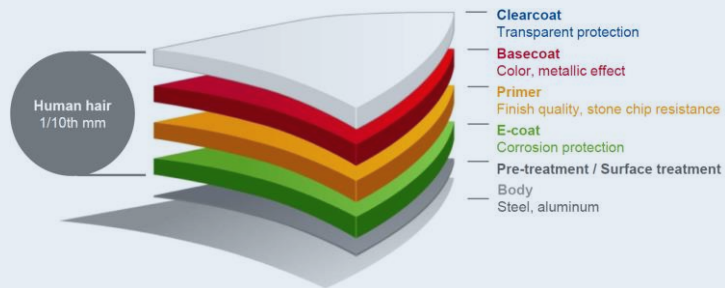
OEM coating



Car part coating
Interior & exterior



Refinish coating



BASF Highlight Products

Defoamers

FoamStar® ST 2400
FoamStar® ST 2454
FoamStar® MO 2111

Dispersing Agents

Dispex® Ultra PX 4585
Dispex® Ultra PA 4550
Efka® PX 4310
Efka® PX 4787

Wetting Agents & Surface Modifiers

Hydropalat® WE 3223
Hydropalat® FL 3635
Efka® FL 3755
Efka® FL 3035

Rheology Modifier

Rheovis® AS 1130
Rheovis® PU 1250
Rheovis® RM 1410

UV Absorbers

Tinuvin® 400-DW ECO
Tinuvin® 479-DW ECO
Tinuvin® 384-2
Tinuvin® 400

HALS

Tinuvin® 123-DW ECO
Tinuvin® 249-DW ECO
Tinuvin® 249
Tinuvin® 123

Automotive Coatings Trends

Film properties improvement, process innovation, sustainability

Technology trends

Improve film properties

- Higher chroma & flip-flop
- Optimal appearance & high durability
- New functionalities



Defoamers

Dispersing Agents

Wetting Agents & Surface Modifiers

Rheology Modifiers

Light Stabilizer

Dispex®
Ultra FA 4437
Ultra PX 4585

Efka®
PX 4310
PX 4787

Hydropalat®
WE 3323
FL 3635

Efka®
FL 3740
FL 3755

Rheovis®
AS 1130
HS 1153
PU 1193

Tinuvin®
477
479
152
DW ECO

Process innovation and efficiency

- Improve application robustness
- Spray dust free application
- In mold coating



FoamStar®
ST 2400
ST 2454

Dispex®
Ultra PX 4585

Efka®
PX 4310
PX 4787

Hydropalat®
WE 3323
FL 3635

Rheovis®
PU 1250

Sustainability

- High solid, low VOC
- Low bake
- Shorter process



Efka®
PB 2770

Dispex®
Ultra PX 4452

Efka®
PX 4787

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Highlight Products (1 of 2)



Efka® PX 4310

Market benchmark, high performance dispersant based on **CFRP technology**



Efka® PX 4780 / 4787

Cross-linkable dispersant with **strong viscosity reduction** in solvent-based systems



Dispex® Ultra PX 4585

WB dispersant for with **benchmark performance** in carbon black & organic pigments



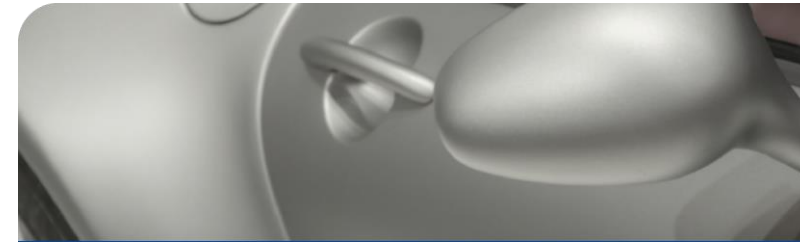
Dispex® Ultra PA 4550

Excellent universal pigment stabilization with **best water resistance**



Dispex® Ultra CX 4452

Superior viscosity reduction with inorganic pigments and excellent water resistance



Hydropalat® WE 3323

Novel hyper-branched surfactant with **excellent substrate wetting with defoaming benefit**

Highlight Products (2 of 2)



Foamstar® ST 2400

Highly compatible silicone free defoamer with fast bubble break time



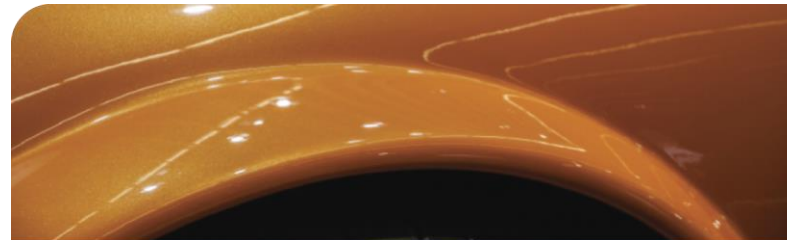
Rheovis® PU 1192/1193

Highly efficient, **exceedingly pseudoplastic** rheology modifiers



Tinuvin® DW ECO

Easy to incorporate **light WB light stabilizers** to meet VOC and eco-label requirements



Efka® FL 3750 / 3755

Highly compatible leveling agents for solvent-borne and solvent-free coatings

Upcoming Launch

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- **BASF offers a full range of Formulation Additives and Performance Additives for Automotive Coatings**
- We make today's challenge tomorrow's solution meeting emerging automotive coating trends
 - **Continuous improvement** in technology & process
 - **New technology**
 - **Sustainability**
- Our **sustainable portfolio for automotive coatings** is ready to power up your formulations and pushing to the next level of the green transformation towards sustainable growth.
- **BASF's Lab Assistant** – powerful digital tool that enables you to find the best raw materials for your specific automotive coatings needs – Explore. Formulate. Collaborate.



BASF Formulation and Performance Additives

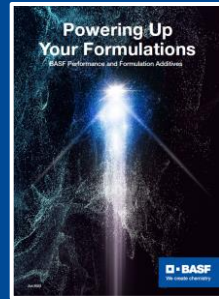
Powering Up Your Formulations with cutting-edge expertise



Designed to simplify your lab life.

– Explore. Formulate. Collaborate.

BASF Lab Assistant is a web-based application that makes it easier for you to learn more about **Performance and Formulation Additives**.



Global Product Catalogue

The comprehensive global catalogue featuring BASF Performance and Formulation Additives products.



Sustainability Presentation

With our sustainable measures and our renewable additives portfolio we are ready to Power Up your transformation towards sustainable growth.



Industry Presentation

Dedicated solution for specialized industry:

- Architecture
- Automotive
- Industrial
- Furniture & Flooring
- Printing & Packaging

Industry Presentation Industrial

Online Tool

Explore.
Formulate.
Collaborate.



Do you want to formulate faster?

BASF's Lab Assistant

Designed to simplify your lab life –
Explore. Formulate. Collaborate.

DISCOVER NOW



New for Furniture & Flooring,
Automotive & Industrial,
Printing & Packaging





We create chemistry

Disclaimer

- **Safety**

When handling the mentioned products, please comply with the advice and information given in the safety data sheets and observe protective and workplace hygiene measures adequate for handling chemicals.

- **Note**

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