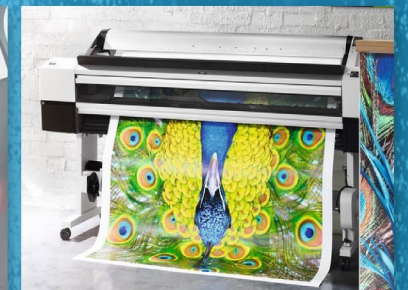
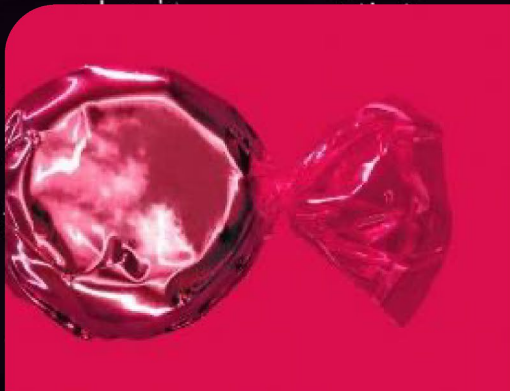




We create chemistry

Powering Up Your Formulations

with Performance and Formulation Additives for
PRINTING & PACKAGING



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Our large portfolio enables solutions for various industries

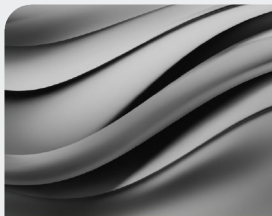
Formulation Additives



Dispersing Agents



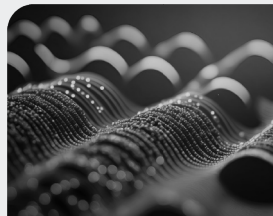
Defoamers



Rheology Modifiers

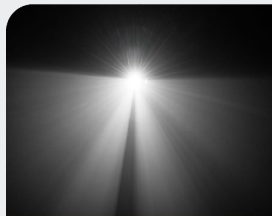


Wetting Agents & Surface Modifiers

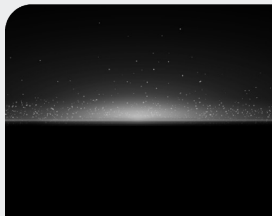


Film-forming Agents

Performance Additives



UV Absorbers



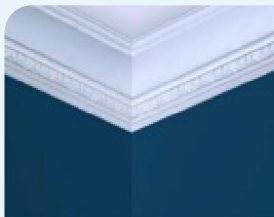
Radical Scavengers



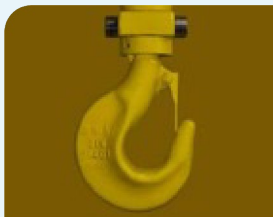
Antioxidants



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



Architectural Coatings



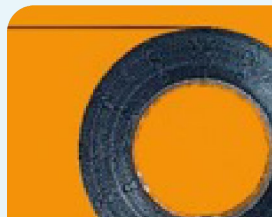
Industrial Coatings



Automotive Coatings



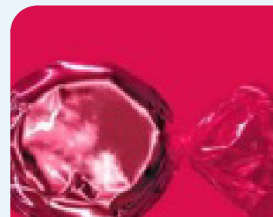
Furniture & Flooring



Adhesives



Construction



Printing & Packaging



Composites

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

CO₂ reduction



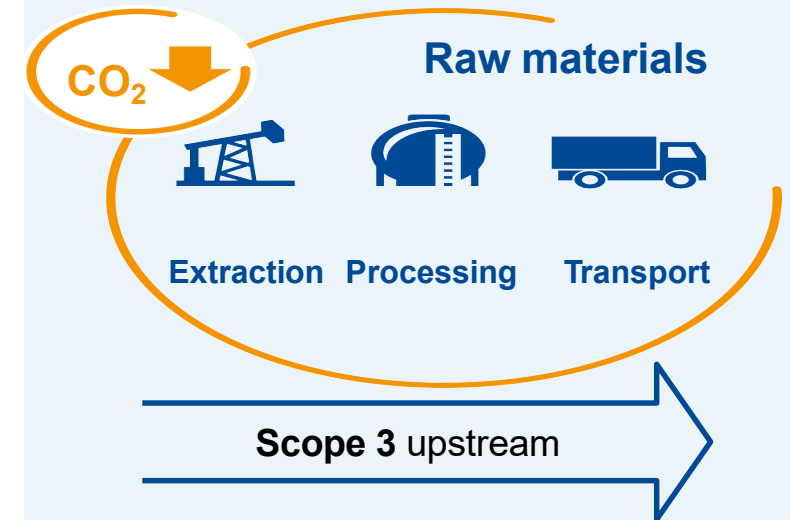
- Reduce the emissions along the value chain
- Derive the PCFs of our products

The Biomass Balance Approach



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

Supplier CO₂ Management



- Sourcing low PCF raw material
- Working with suppliers to achieve measurable improvements

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Sustainability Differentiation – Printing & Packaging

	Dispersing Agents	Defoamers	Rheology Modifiers	Wetting Agents and Surface Modifiers	Film-forming Agents	Light Stabilizers
 Food Contact*	Efka® PX 4701/PX 4703 Dispex® Ultra FA 4437 Dispex® Ultra FA 4480 Dispex® Ultra PX 4290 Dispex® Ultra PX 4522 Dispex® Ultra PX 4565 Dispex® Ultra PX 4585 Hydropalat® WE 3966	Foamaster® NO 2306 FoamStar® SI 2210 FoamStar® SI 2213 FoamStar® SI 2217 FoamStar® SI 2240	Rheovis® AS 1125 Rheovis® AS 1127 Rheovis® AS 1130 Rheovis® HS 1303 EB Rheovis® PE 1330 Rheovis® PU 1235 EC	Efka® SL 3210 Efka® SL 3259 Hydropalat® WE 3130 Hydropalat® WE 3197 Hydropalat® WE 3220 Hydropalat® WE 3475 Hydropalat® WE 3477 Hydropalat® WE 3650	Efka® PL 5381 Efka® PL 5382 Efka® PL 5643 Efka® PL 5646 Loxanol® CA 5140 EM	
 Efficiency	Efka® PX 4350 Efka® PX 4701/PX 4703 Efka® PX 4733 Dispex® Ultra PX 4290 Dispex® Ultra PX 4575 Dispex® Ultra PX 4585 Hydropalat® WE 3966	FoamStar® SI 2210 FoamStar® SI 2240	Rheovis® AS 1130 Rheovis® PU 1331 Rheovis® PU 1235 EC Rheovis® HS 1303 EB	Efka® SL 3210 Efka® SL 3259 Efka® SL 3299 Hydropalat® WE 3130 Hydropalat® WE 3197	Loxanol® MI 6730	Tinuvin® 400 Tinuvin® 479
 Renewables	Dispex® Ultra FA 4437 Dispex® Ultra FA 4480	Efka® PB 2770 Foamaster® NO 2306 Foamaster® NO 2331 FoamStar® SI 2210 FoamStar® SI 2217	Efka® RM 1900 Efka® RM 1920 Rheovis® AS 1127	Hydropalat® WE 3120 Hydropalat® WE 3130	Efka® PL 5381 Efka® PL 5382 Loxanol® CA 5140 EM	Tinuvin® 292 Tinuvin® 123
 Enables water-based	Dispex® Ultra CX 4452 Dispex® Ultra PX 4290 Dispex® Ultra PX 4522 Dispex® Ultra PX 4565 Dispex® Ultra PX 4575 Dispex® Ultra PX 4585 Hydropalat® WE 3966	FoamStar® SI 2210 FoamStar® SI 2213 FoamStar® SI 2217 FoamStar® SI 2240	Rheovis® AS 1125 Rheovis® AS 1130 Rheovis® HS 1303 EB Rheovis® PE 1330 Rheovis® PU 1235 EC	Hydropalat® WE 3130 Hydropalat® WE 3197 Hydropalat® WE 3221 Hydropalat® WE 3229 Hydropalat® WE 3475 Hydropalat® WE 3650	Loxanol® MI 6730	Tinuvin® DW ECO
 Enables 100% systems	Efka® FA 4611 Efka® PX 4701 Efka® PX 4703 Efka® PX 4733 Efka® PX 4780	Efka® PB 2770 Foamaster® NO 2306		Efka® SL 3210 Efka® SL 3259 Efka® SL 3299 Hydropalat® WE 3220		Tinuvin® 479 Tinuvin® 5071

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Focus products for Printing & Packaging

	Dispersing Agents		Defoamers	Rheology Modifiers	Wetting Agents & Surface Modifiers	Film-forming Agents	Light Stabilizers			Antioxidants
	High molecular weight	Low molecular weight					UVA	HALS	DW	
Water-based	Dispex® AA 4040 AA 4140 Dispex® Ultra CX 4452 PA 4560 PX 4290 PX 4522 PX 4565 PX 4575 PX 4585	Dispex® Ultra FA 4437 FA 4480 FA 4483	Foamaster® NO 2306 NO 2331 WO 2310 FoamStar® ED 2522 SI 2210 SI 2213 SI 2217 SI 2240 SI 2250 SI 2292	Rheovis® AS 1125 AS 1130 HS 1169 HS 1212 HS 1303 EB PE 1330 PU 1214 EC PU 1235 EC PU 1291 PU 1331 PU 1333	Hydropalat® Efka® SL 3683 SL 3210 WE 3120 SL 3299 WE 3130 WE 3197 WE 3220 WE 3221 WE 3229 WE 3475 WE 3477 WE 3650 WE 3966				Tinuvin® 479-DW ECO	Irganox® 1010-DW ECO
Solvent-based/ Solvent-free/ UV systems	Efka® PU 4009 PU 4063 PA 4404 PX 4300 PX 4320/ 4321 PX 4330 PX 4350 PX 4360 PX 4701 PX 4703 PX 4733 PX 4780	Dispex® Ultra FA 4431 Efka® FA 4611	Efka® PB 2744 PB 2770 Foamaster® NO 2306	Efka® RM 1900 RM 1920	Efka® FL 3740 EH SL 3210 SL 3259 SL 3299 Hydropalat® WE 3220 WE 3229	Efka® PL 5381 PL 5382 PL 5643 PL 5646 PL 5688	Tinuvin® 479	Tinuvin® 249		Irganox® 1010/1010 FF 1076 1135 1139 Irgastab® UV 22

New products

Printing & Packaging applications



- Flexographic printing
- Gravure Printing
- Ink-Jet
- Screen printing
- Lithographic / Offset



Flexible packaging

Inks, primers and varnishes for a broad range of plastic substrates for different applications (e.g. shrink sleeves, sandwich structures, etc.) being UV- and water-based systems



Overprint varnishes

Water-based and UV-based Overprint varnishes are used for ink protection with regards to rub resistance but also for esthetic reasons (e.g. gloss/matt effects)



Corrugated paper and board

Water-based inks for different purpose – Resin-based and resin-free.



Solvent-based inks

Packaging for paper and board as well as for film printing for higher sophisticated applications like sterilization etc.



UV ink systems

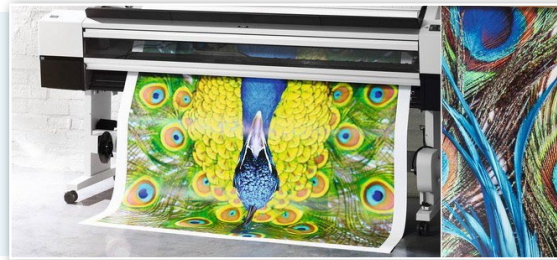
UV -systems are used mostly in areas where resistance, gloss, appearance is required. One possibility to move away from solvent –based systems

Printing & Packaging trends -

Digital printing, improve sustainability profile, conversion to water-based and UV

Printing & Packaging trends

Digital printing –
ink-jet the future market



Improved sustainability
(regulatory, low VOC, CO2)



Conversion from solvent-
based to **100% or water-
based systems**



BASF Highlight Products

Defoamers

Dispersing Agents

Wetting Agents & Surface Modifiers

Rheology Modifiers

Antioxidants

Dispex® Ultra

PX 4290/4565

PX 4575/PX 4585

Efka® PX 4701 / 4703

Efka® PX 4321 / 4780

Efka®

SL 3259

Hydropalat®

WE 3220 / WE 3229

Rheovis®

PE 1330

Efka® PB 2770

Foamaster® NO 2331

FoamStar®

SI 2217

SI 2240

Dispex® Ultra

PX 4290

PX 4565

PX 4585

Efka® PX 4701 / 4703

Efka®

SL 3259

Hydropalat®

WE 3220 / WE 3229

Rheovis® PU

1235 EC

Irganox®

1010-DW ECO

Efka® PB 2770

Foamaster® NO 2331

FoamStar® SI 2240

Dispex® Ultra

PX 4290

PX 4565 / PX 4585

Efka® PX 4701 / 4703

PX 4733 / 4780

Efka®

SL 3259

Hydropalat®

WE 3220 / WE 3229

Rheovis®

PE 1330

PU 1333

Irgastab®

UV 22

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Highlight Products (1/2)



Efka® PB 2770

Solvent- and silicone-free deairator for UV-based systems in industrial coatings, furniture & floorings



FoamStar® SI 2240

Highly-efficient defoamer with broad food contact compliance for water-based systems



Dispex® Ultra PX 4290

Dispersing agent for organic and inorganic pigments with outstanding color strength and excellent viscosity reduction



Dispex Ultra® PX 4565

New aqueous dispersing agent for organic pigments and C-blacks with improved value in use



Rheovis® PU 1333

Most newtonian Rheology modifier for improving printability of water-based inks.



Loxanol® MI 6730

Excellent adhesion promoter for film and foil, also well suitable for PE lamination extrusion

Highlight Products (2/2)



Efka® FA 4611

Solvent-free dispersing agent for inorganic pigments in 100% systems, solvent-based coatings and UV-based printing inks



Efka® PX 4701 | PX 4733

High-molecular-weight dispersing agents for high-performance inkjet and flexographic ink



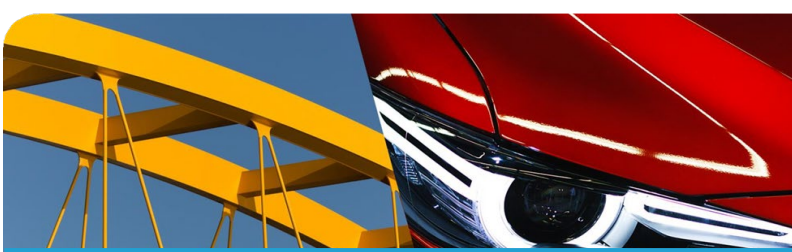
Efka® PX 4780

Innovative reactive, high performance dispersing agent for 100% systems



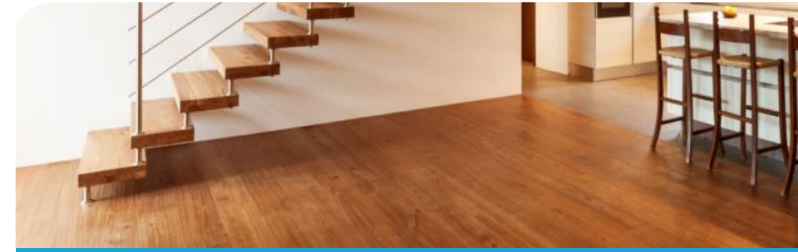
Efka® PX 4703

100% active dispersing agent with broad pigment compatibility in different UV-inks and Coating systems



Efka® PX 4321

50% active dispersing agent with broad pigment compatibility for solvent- and UV-based ink-jet inks



Hydropalat® WE 3229

Silicone based wetting agent with pronounced defoaming action

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Summary

- **BASF offers a full range of Formulation Additives and Performance Additives for Printing & Packaging**
- We make today's challenge tomorrow's solution meeting emerging Printing & Packaging trends
 - **Digitalization** – following the market trend towards ink-jet printing
 - Improved **Sustainability** – e.g. Food Contact Compliance
 - **Conversion** from solvent- to water-based or 100% systems
- Our **sustainable portfolio for Printing & Packaging** 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 needs



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**.

BASF

We create chemistry

Lab
Assistant



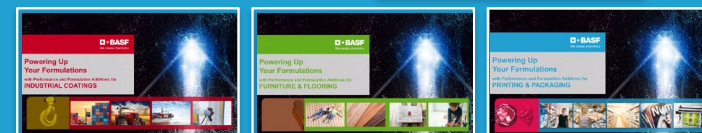
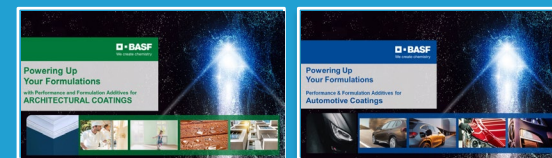
Global Product Catalogue

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

BASF
We create chemistry

Industry Presentation Printing & Packaging

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



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**

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our products, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.



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