In touch, in depth, invaluable. BASF Performance and Formulation Additives
Foreword

Better performance, enhanced sustainability, more profitability – solutions from BASF Performance and Formulation Additives respond to the needs and wishes of paint and coatings manufacturers all over the world. We operate in widely diverse industries and markets, but our focus remains the same: to offer each customer a decisive competitive advantage. This is only possible with a proven approach that goes far beyond the provision of additives.

Paints and coatings form surfaces and bonds that are essential to quality, appearance and durability in a virtually endless array of applications – ranging from printed material to buildings. Yet paints and coatings always have one thing in common: they are what people see and touch.

We see this as a perfect analogy of our relationship with the industries we serve: we are able to give our customers a better edge because we stay closely in touch. By keeping connected to the needs and wishes of each customer, we are in a strong position to support your strategic goals. With our unsurpassed scientific capabilities, global presence, comprehensive portfolio and formulation know-how across industries and product lines, BASF can offer in-depth expertise in developing breakthrough concepts. It all adds up to value for you, your customers and end consumers.

This approach can be summed up in just a few words: In touch, in depth, invaluable.

Dr. Claus Dallner
Global Business Management
Performance and Formulation Additives

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The demand for fast innovation and adaptation to emerging trends has never been higher. Evolving markets call for new solutions, and players in virtually all industries are working to increase their agility. But the companies we serve face particularly stiff challenges: extremely high levels of quality, safety, reliability and environmental compatibility are all expected in paints and coatings.

BASF Performance and Formulation Additives gives you an edge in mastering the resulting complexity of R&D efforts. Our know-how extends beyond additives to include pigments, resins, dispersions and other components for solutions in industries as diverse as architectural, industrial and automotive coatings, adhesives, printing and packaging, furniture and flooring, construction and composites. Along with this end-to-end formulation expertise, we are also equipped with knowledge of trends in regional markets based on our global presence. Because our experts have a deep understanding of your market and manufacturing technologies, we are your ideal partner in developing new solutions that enable you to rise above the competition.

To make it easy for you to explore our solutions for your industry, we have developed a Web-based app. The Solution Finder (available for Formulation Additives) allows you to navigate according to your priorities in the application areas of paints and coatings, adhesives and construction. Product group, formulation technology, paint system or desired effect – regardless of which aspect you are focused on, the intuitive digital tool will guide you straight to the solutions you need to succeed. (https://www.basf.com/solution-finder).
In line with BASF’s strategic position, “We create chemistry for a sustainable future,” BASF Performance and Formulation Additives delivers solutions that enable customers to meet growing demands and expectations for environmentally friendly paints and coatings. With products and services that reduce energy consumption and emissions in manufacturing processes while enhancing the durability and service life of final products, we support you in turning sustainability into business opportunities.

BASF Performance and Formulation Additives takes out the guesswork with an easy overview of our solutions. Based on the key drivers and issues within the industries and regions we serve, we have assessed the sustainability contribution of each of our products in its specific application and position in the value chain. This externally audited methodology, termed Sustainable Solution Steering®, enables us to give you a clear view of our portfolio and how you can benefit most from it. For various industries, including architectural coatings, our Sustainability Quick Guides offer an easy overview of the results grouped in the most relevant parameters. BASF’s Mass Balance approach measures the total volume of renewable versus fossil feedstocks used in production, allowing you to use verified-sustainable components in your products.

Customers across all industries profit from our support in enhancing their sustainability wherever possible. Our solutions for water-based industrial applications, for example, support coatings that combine durability with eco-friendliness. In addition, our packaging concepts allow sustainable and food contact-compliant solutions to meet the highest requirements.

In light of the increasing need for more sustainable solutions on a global scale, we can support you in taking advantage of the resulting dynamic growth in various market segments.
Brands to power your brand

Over decades of serving some of the world’s most demanding industries and brand-name manufacturers, we have developed an array of additives that have set the standards. Our ingredients are market benchmarks and key components of highly successful paints and coatings for industrial and consumer applications. Based on proven stability and performance in different systems, these additives have become ingredient brands in their own right.

ERK® dispersing agents, wetting agents and surface modifiers, defoamers and rheology modifiers are designed for non-aqueous formulations, including eco-friendly solutions.

Displex® and Displex® Ultra dispersing agents provide different performance properties in aqueous systems and universal pigment concentrates. The broad technology portfolio includes polymeric, oligomeric and surfactant-based dispersing agents. Benefits include outstanding viscosity reduction, increased color intensity and hiding power, enhanced gloss, low-VOC and APEO-free and improved freeze-thaw stability.

With Foamaster® and FoamStar®, we offer an outstanding selection of defoamer technologies for aqueous systems, including products based on mineral oils or natural oils, as well as specialty-emulsion defoamers and organo-silicone-containing, silicone-free and star-polymer-based defoamers. They provide a perfect balance between excellent foam suppression, high compatibility, long-term efficiency, easy handling and environmental compliance in the form of VOC-free, low-S-VOC and low-odor solutions.

The Hydropalat® lineup is a selection of substrate wetting, colorant compatibilizing, flow control, slip control and anti-mar agents for water-based systems.

Rheovis® is a broad portfolio of synthetic rheology modifiers for aqueous systems, including non-ionic associative (l-HOE/ HMPE), anionic associative (HASE) and non-associative thickener (ASE) technologies. Several of these highly efficient products provide additional functionalities like wetting properties and health or environmental aspects (free of VOC, APEO and heavy metals, with very low odor).

Attapalite® and Attapulgite® rheology modifiers function as co-thickeners with cellulose, associative and siloxane swellable thickeners in demanding applications. The thixotropic thickeners are derived from the naturally occurring mineral attapulgite. Suitable for both aqueous and solvent-borne systems, these additives are ideal for a wide spectrum of demanding applications.

Loxanol® coalescing agents have a wide range of applications in low-VOC systems, improving open time in processing and enhancing water resistance. Renewably sourced Loxanol® variants offer highly efficient coalescing effects and scrub resistance with very low odor.

Tinuvin® stabilizers and ultraviolet light absorbers protect coatings during production, processing and service life. The line includes UV absorbers (UVA) and hindered amine light stabilizers (HALS) for effective stabilization against the detrimental effects of light and weathering, as well as phenolic and non-phenolic antioxidants to safeguard against thermally induced degradation. The product range is completed with antimicrobials and optical brighteners.
Add to your future success

Cost pressure, fierce competition, increasing regulatory and performance demands – these are some of the stiff challenges the paints and coatings industries face. Contributing to the complexity is the accelerating pace of change, driven by digitization.

But current trends also point to huge opportunities for players in industries that answer increasing demand in emerging markets, for example. At BASF Performance and Formulation Additives, we are convinced that the future belongs to those who embrace changes and turn them into opportunities.

To support customers in adapting to developments and mastering the future, we are cooperating more closely than ever and introducing increasingly agile business processes.

In the following pages, you will find more details on the solutions BASF Performance and Formulation Additives provides for specific industries – including yours.

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Paint manufacturers rely on BASF Performance and Formulation Additives for solutions that enhance performance, convenience and cost-effectiveness. Whether exterior or interior, aimed at the DIY consumer market or at professional painters, demands on architectural coatings are high and rising. We deliver not only the technology to equip coatings systems with exceptional features, but also solutions that reduce your reliance on costly raw materials to help you stay competitive and profitable.

With concepts for water-based, low-VOC and low-odor formulations, we offer extensive support in achieving greater sustainability, enabling manufacturers to meet regulatory demands and serve the growing market for healthy, eco-labeled paints without compromising on performance. In addition, we offer additives that improve cleanability and scrub-resistance, enhance surface textures and enable customization.

And excellent additives are just the beginning: with knowledge in the latest trends and deep understanding of architectural coatings markets, we can provide support throughout the paint value chain – from product design and development to formulation. By cooperating with our experts, customers in the paint industry can profit from the global scientific resources of BASF to create trendsetting products.
From heavy equipment to satellites, the applications for industrial coatings are highly diverse and constantly evolving. Yet as varied as they are, they all share one factor: demanding technical requirements combined with pressure to reduce total formulation costs.

Based on vast experience in many of the most challenging segments, including aerospace and marine coatings, BASF Performance and Formulation Additives has developed solutions that ensure maximum protection and durability under stress, as well as qualities like haptics or resistance to weathering, color fading and dirt pickup. At the same time, our high-performance additives can enable coatings with specialized properties such as adhesion with multiple materials or thinner and fewer coating layers. In addition, we support you in meeting regulatory standards with innovative concepts and products. We enable water-based and low-VOC formulations, as well as industrial coatings that contain hazard label-free materials.

Because the category of industrial coatings encompasses so many different applications, we are keenly focused on the individual demands of each industry. For BASF, scientific research in specialized industrial coatings is an investment that pays off in win-win partnerships. This means regardless of which materials your coatings must adhere to and which types of stress they must withstand, you can count on our experts to cooperate with you and develop solutions for your needs.
Immaculate surfaces, trouble-free processing, long-term durability — automotive coatings have to meet the highest standards in both appearance and performance. Constant excellence is required to keep assembly lines running. In addition, coatings must respond to changing trends.

BASF Performance and Formulation Additives is dedicated to the needs of the automotive industry. Our standard-setting additives include highly effective defoamers and wetting agents. With additives that continuously improve efficiency and reduce energy consumption during formulation and application, we support the industry’s ongoing efforts to boost cost-effectiveness without compromising on performance. We can also deliver solutions for special requirements, like silicone-free coatings or a uniform finish on different substrates such as metal and plastic.

In close cooperation with OEMs, we have developed solutions that function reliably and consistently in the production process, including solutions for wet-in-wet application. Leading manufacturers rely on us for additives and support in creating automotive OEM and refinish coatings with a competitive edge. Whether you are seeking to improve efficiency, add technical features or take advantage of a new trend, we have the knowledge and resources to support you.
Coatings for furniture and flooring are expected to deliver the best of both worlds: maximum durability and full compliance with indoor air quality standards and other regulations. Based on this special set of demands, BASF Performance and Formulation Additives places high priority on solutions for this segment.

As in other indoor applications, regulatory requirements and consumer expectations for safety and environmental compatibility in furniture and flooring coatings can be expected to increase. To master this demand, we enable partners to convert to water-based formulations and eliminate harmful emissions. Our focus is on turning the challenge into an opportunity for our customers with sustainable technologies that do not compromise performance.

With specialized additives we enable best-in-class coatings, for example, with outstanding scratch resistance in low-VOC and zero-formaldehyde systems. Our targeted solutions and support can help you develop highly appealing paints, lacquers and other finishes in line with your manufacturing process requirements. Speak with our experts about innovative solutions that are not only easy to apply on different underlying materials, but also perfectly match the preferences of end consumers.
A
dhesives are as diverse as the various
materials they hold together. And because they
are so central to the quality, safety and functionality
of objects ranging from food packaging to airplanes,
developing adhesives demands highly specific
knowledge of different segments and processes.

BASF Performance and Formulation Additives draws
on specialized expertise in a broad spectrum of
adhesives and applications. Our portfolio includes
pressure-sensitive adhesives (PSA) and packaging,
as well as excellent food-contact-compliant
solutions. Companies in different industries profit
from our support in developing innovative adhesives
that contribute significantly to sustainability and
efficiency, for example, by allowing cold-processing
or reducing harmful emissions.

Regardless of which application your adhesives
are designed for, whether for industrial or consumer
use, PSA, heat-curing or cold processing, we will
partner with you to develop concepts that make
a difference. Our experts have the technology and
know-how to support you in achieving your
performance goals.
The world of fast-moving consumer goods (FMCG) is strongly shaped by printing and packaging solutions that protect products, enable safe and efficient transport, as well as appeal to the eye in retail settings. Even in the digital age, print media are omnipresent, and FMCG industries rely on high-quality printing as the optical interface between their products and consumers.

Requirements vary widely depending on media and goods packaged, but we at BASF Performance and Formulation Additives have defined a number of key topics for our focus. These include solutions for digital printing and 3D printing, as well as food-contact-compliant printing and packaging. In addition, our experts are continuously working to improve the sustainability profiles of printing and packaging products.

Our experts have what it takes to serve the specific needs of different markets and geographies, for example, by boosting efficiency through digital printing. In addition, we can deliver solutions that meet all relevant food-contact regulations worldwide. Wherever you operate, whichever segment you cater to, we will work with you to develop cost-effective and appealing inks and other products that meet the needs and wishes of your target group.
In the continuously evolving field of construction materials, technological progress based on chemistry play an instrumental role. Regulatory and consumer demand is high for sustainable, safe and long-lasting materials. At the same time, cost pressure is unrelenting.

Due to the vast array of different material types – from adhesives and sealants to mastic and cementitious waterproofing systems – in-depth industry knowledge and understanding of construction processes are key requirements for innovation. At BASF Performance and Formulation Additives, manufacturers of building materials of all types will find experts in their respective segments.

With sophisticated chemical engineering and market expertise, we will cooperate with you to develop new, better, easier to process and more sustainable solutions. You can also count on our support to refine your existing products and boost their performance.
In a wide array of industries and applications, composite materials are helping reduce the weight of different elements while increasing their rigidity, resilience and overall performance. From wind energy to lightweight automobile components, composites can contribute to sustainability and efficiency.

In light of the need for greater sustainability across different industries, BASF Performance and Formulation Additives believes in a bright future for composites. With our chemical engineering expertise and scientific resources, we are in a position to partner with manufacturers in developing tomorrow’s composites.

Our experts are equipped with hands-on experience in several composite types that address specific challenges. This means you can take advantage of our support and cooperate with us and other suppliers to create new solutions to overcome the challenges of your target group.
In the context of the Group-wide initiative BASF 4.0, we are leveraging digital technologies and data to generate value for the industries we serve. Digitization not only accelerates innovation processes, but also enables the vertical flow of information throughout value chains, providing a sound basis for targeted new solutions for specific demands and segments.

In addition, we increasingly offer digital tools that help customers boost the efficiency of their operations. A prime example is the Web-based app Lab Assistant for Architectural Coatings (available for Formulation Additives in Europe), developed in response to customer surveys using the Design Thinking method. Stay tuned: more digital tools are in the pipeline.

Scan QR code for details
www.lab-assistant.basf.com
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