

WHO WE ARE.

“WHAT COUNTS IS WHAT WE DO”

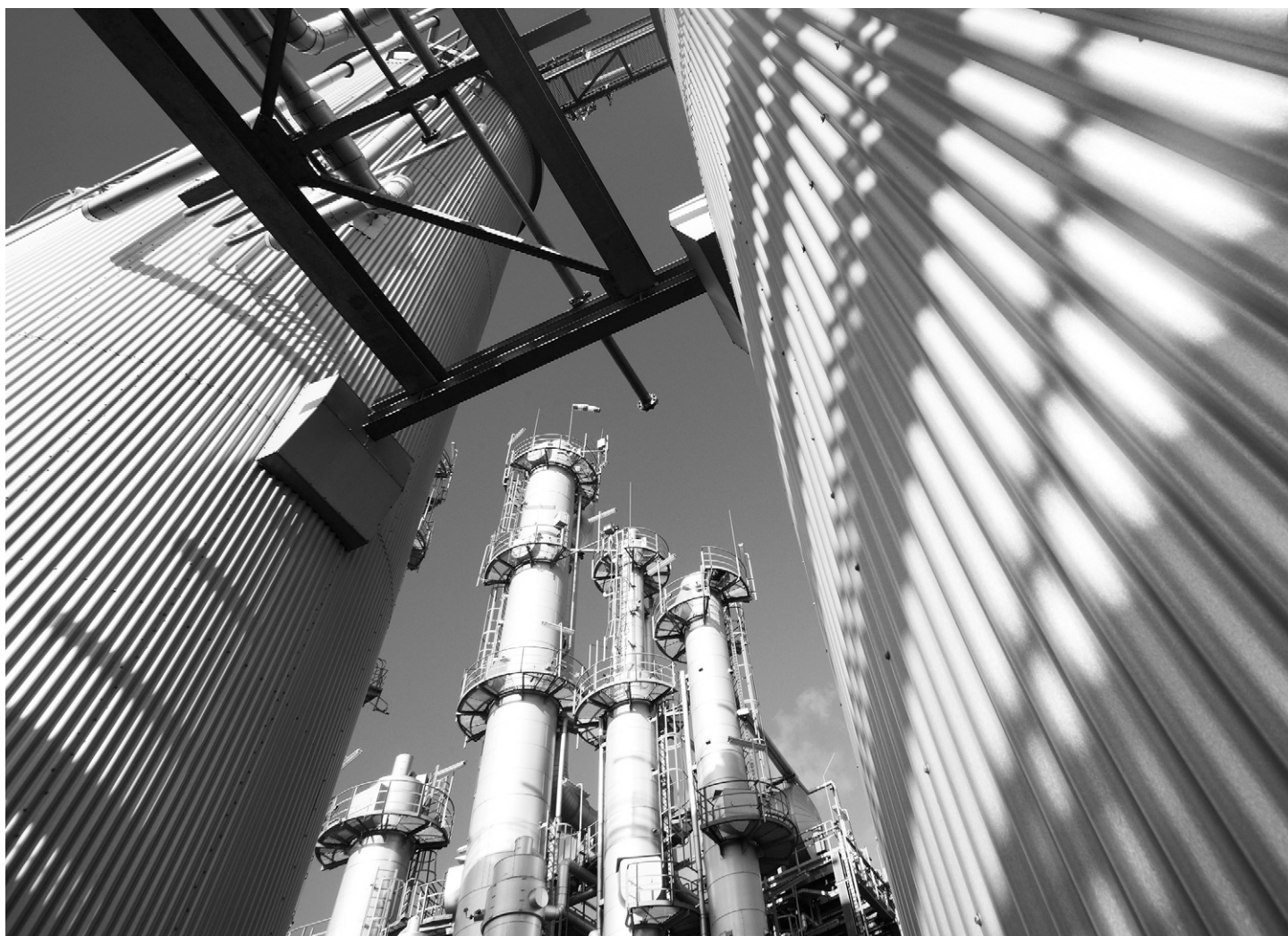
Interview with Chairman Christian Kullmann

170 YEARS OF EXPERTISE IN CHEMISTRY

While the brand is young, the historical roots of the company go a long way back

ACHIEVING MORE TOGETHER

Our employees throughout the world are the key to Evonik's success



THE CREATIVE SPECIALTY CHEMICALS POWERHOUSE

We may not manufacture tires, mattresses, medications, or animal feeds, but Evonik is part of all of those products—and many more. While we often contribute only small amounts of material, those contributions are precisely what make the difference. That's because Evonik products make tires fuel efficient, mattresses more elastic, medications more effective, and animal feeds healthier.

That's what specialty chemicals are all about. And when it comes to specialty chemicals, we're among the best in the world.

Evonik stands for attractive business and innovative prowess. Our corporate culture is geared toward results, profitable growth, and increasing the value of the company. Operating in over 100 countries, we benefit from close customer relationships and leading market positions. Over 36,000 employees are united by the understanding that no product is so perfect that you can't make it better.

EVONIK AT A GLANCE

Strategic Management Holding Company

NUTRITION & CARE

Products for applications in the areas of consumer goods, animal nutrition, and health

RESOURCE EFFICIENCY

Environment-friendly and energy-efficient system solutions for industry

PERFORMANCE MATERIALS

Intermediates especially for the agricultural, rubber, and plastics industries

TECHNOLOGY & INFRASTRUCTURE

Site Management, Energy & Utilities, Technical Service, Logistics, Process Technology and Engineering

€15.0 billion
sales*

€2.6 billion
adjusted EBITDA*

17.3%
adjusted
EBITDA margin*

€1.15
dividend

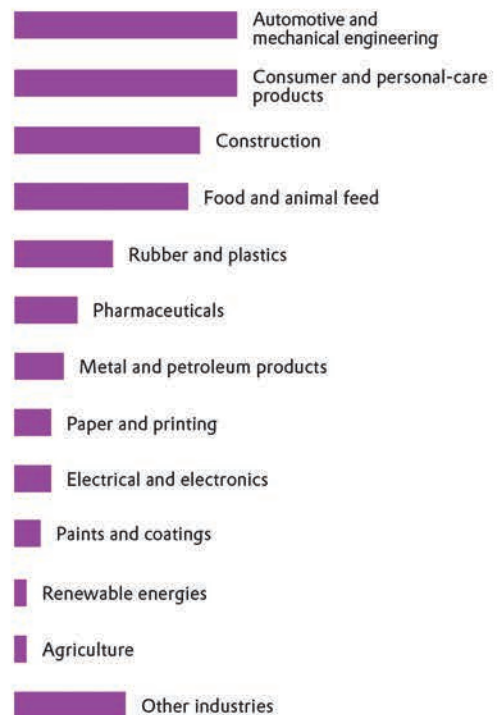
80%
of sales from leading
market positions

€2.78
adjusted
earnings per share*

>36,000
employees

104
nationalities

Evonik's end-markets



OPERATIONAL SEGMENTS

Nutrition & Care

The *Nutrition & Care* segment makes products for applications in consumer goods for everyday needs, in animal nutrition, and in the healthcare industry. The development of this business is driven by socioeconomic trends such as global population growth and the rise of an affluent middle class in emerging markets.

€4,646 million
sales*

8,224
employees*

**THE NUMBER ONE
IN THE MARKETS FOR**

DL-methionine
Amphoteric surfactants
Ceramides

Resource Efficiency

The *Resource Efficiency* segment produces high-performance materials for environment-friendly and energy-efficient system solutions, for example, for the automotive, paints and coatings, adhesives, and construction industries. Rising demand for resource efficiency in production drives business development in this segment.

€5,709 million
sales*

10,268
employees*

**THE NUMBER ONE
IN THE MARKETS FOR**

Isophorone chemicals
Oil additives
Silica
Polyamide 12

Performance Materials

The *Performance Materials* segment manufactures intermediate products, especially for the agricultural, rubber, and plastics industries. Ongoing globalization is opening up market opportunities, especially for Performance Materials. This development is strengthened by a growing, affluent middle class, especially in emerging markets in Asia.

€3,976 million
sales*

4,132
employees*

**THE NUMBER ONE
IN THE MARKETS FOR**

Butene-1
Alkoxides



2

BETTER WITH EVONIK

How we give products their unique properties



36

IDEAS FOR THE DIGITAL FUTURE

Chief Digital Officer Henrik Hahn on Evonik's status as a pioneer



14

OUR OPERATIONAL SEGMENTS

Close relationships—to the markets and with our customers

46

ONE-TWO PASS

Our unique partnership with the Borussia Dortmund soccer team



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BETTER WITH EVONIK

WE GIVE PRODUCTS THEIR PROPERTIES

Nothing is so perfect that you can't make it better. Through the use of specialty chemicals, we can make the products we use in industry and in our everyday lives more comfortable, safer, healthier, and more practical.

WE DON'T RAISE CHICKENS ...

... but we help them grow more sustainably.



If chickens are to remain healthy, they require good, nutritious feed. A healthy and balanced diet strengthens the body's defense system and ensures that the animals do not get sick in the first place. Evonik's probiotics play a key role here. And our amino acids support the animals in better utilizing their feed. This means that less feed is required, which has positive consequences: The use of antibiotics in animal husbandry is reduced, and so is the global use of farmland and the consumption of water and energy.



We don't have stadium seats in our portfolio...

... but because of us they can take a real beating.

Thanks to triacetone amine derivatives incorporated into the seat material, stadium seating can withstand more than just countless fans and boisterous

soccer celebrations; they also resist UV radiation from sunlight—an opponent that makes itself felt for far longer than just 90 minutes.

WE DON'T SELL MATTRESSES ...

... but we do make them more comfortable.

That's because our additives for polyurethane foams enhance their comfort characteristics, so that when you go to bed, you sink into your viscoelastic mattress before you sink into dreamland. And thanks to our formulations, upholstered furniture and car seats perfectly conform to the contours of your body.





DIAPERS ...

... are not part of our product portfolio—but absorbency is.

Our superabsorbents are capable of absorbing and retaining up to 500 times their own weight. Even under pressure—like when babies sit on their diapers—these little powerhouses keep all of the liquid in.

TIRES ...

... don't come from our factories. But we help them save gasoline.

Energy-saving tires reduce fuel consumption by up to 8 percent. The silica-silane system from Evonik they contain reduces gas-guzzling rolling resistance in tires while improving their skid resistance and wet grip. That way, the only one caught in a tailspin is the gas station attendant—every time you pass by without stopping.



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FOUR TIMES BETTER

Evonik makes medications...

1 ... more effective: Medications with highly potent actives are used above all for treating cancer. Because they are so effective, tiny amounts are all you need. And Evonik has a greater production capacity for these high-potency actives than any other pharmaceutical industry contractor in the world.

2 ... more targeted: Our EUDRAGIT® pharmaceutical-grade polymers encapsulate active agents and then dissolve right where they are needed in the body.

3 ... more affordable: Modern tablet presses can produce up to 1.6 million tablets—per hour! Our AEROSIL® flow enhancer ensures that the active agents will be evenly distributed no matter how fast the material is flowing.

4 ... longer lasting: Needles are out of a job! That's because we take active agents that physicians used to have to inject into patients and package them in lactic-acid-based copolymers. Once in the body, this "packaging" dissolves in a controlled manner to release just the right amount of actives.



We don't build buildings ...

... but we make sure they are waterproof and more sustainable.

Our building protection agents are blended into the liquid concrete used in home construction to form a deep, uniform barrier against water penetration. That keeps the foundation of the building sturdy for years to come and lets homeowners enjoy dry feet. But if they are going to be both dry

and warm, then the cold has to be kept at bay. And CALOSTAT® insulation panels can help. This silicon dioxide material is recyclable, non-flammable, and has extremely good insulating values. That protects the environment—by significantly reducing heating needs—while also improving fire safety.



INTERVIEW WITH CHRISTIAN KULLMANN

“WHAT COUNTS IS WHAT WE DO”

Christian Kullmann became chairman of Evonik's executive board on May 23, 2017. In this interview, he describes what he has achieved so far and in which direction he wants to lead the company.

Mr. Kullmann, you run a corporation that makes products hardly anyone has heard of. What does Evonik actually do?

We make specialty chemicals. That means we produce sophisticated chemicals and develop solutions for our customers' problems.

Which problems? Which customers?

We don't think there's a product on earth that's so good it can't be improved. We do everything in our power to make things healthier, more durable and more resource-efficient—in short, better. That includes everything from sustainable salmon farming, foam mattresses, and toothpaste to tires, prostheses, and 3D printing.

How do you do that?

Take specialty additives, for instance: These are ingredients that have a major effect, even in small amounts. Our customers use these additives in their own production processes to turn an ordinary product into an extraordinary one with unique, positive properties.

How do you know what your customers need?

In the field of specialty chemicals, we work very closely with our customers and develop a lot of products together. Thanks to the good, lasting relationships that result, we understand our customers' products and their businesses very well.

In which countries are Evonik products marketed?

We do business in over 100 countries on all continents, but our focus is on Europe, North America, and Asia.

And where is Evonik's production located?

Preferably wherever our customers are. Take car tire manufacturers as an example: We supply these customers with specialty products that reduce rolling resistance and, in so doing, help lower fuel consumption. One hub of the tire indus-

try is South Carolina, where all of the leading tire manufacturers have major plants. So that's precisely where we have built our new plant.

That hasn't always been the case at Evonik.

Even though the name Evonik has only been around since 2007, our company's history goes all the way back to the 19th century. And that history is marked by constant change. Any company wanting to assert itself on the world's markets has to change with the times. It has to recognize developments on the markets and in society early on and then adapt its businesses accordingly. And we've been doing that quite consistently.

By focusing on chemistry?

In September 2007, Evonik was still a conglomerate doing business in energy, real estate, and chemistry. In the years that followed, we moved step by step to turn that into the company we know today, which is focused on specialty chemicals and has been listed on the stock exchange since 2013. People who worked at RAG, Degussa, and many other companies have become Evonik employees—a force of over 36,000 women and men around the world.

Is that the end of the transformation for now?

I don't think so. As I see it, both our era and our industry are hallmarked by constant change. If you want profitable growth, you certainly can't afford to stay put.

"If you want profitable growth, you certainly can't afford to stay put."

CHRISTIAN KULLMANN

“We’re not looking to buy at any price, and a solid financial situation is important to us.”

CHRISTIAN KULLMANN

In that respect, you’ve set quite an ambitious goal: “We aim to be a best-in-class specialty chemicals company.” That’s easier said than done. How would you measure that?

Today’s Evonik is a powerful, successful company. We have excellent employees, we’re innovative, and we’re profitable. Most recently we achieved an EBITDA margin between 16 and 18 percent. That would be enormous in other industries, but in the field of specialty chemicals, that doesn’t yet put us at the top. Which is why we’ve set ourselves the goal of increasing our margin to between 18 and 20 percent. That would make us a top performer within the chemicals industry as a whole.

But surely profit margins are not the only criterion? That’s quite right. The executive board is focusing on three strategic success factors: on innova-

tive power revolving around the needs of the customer, on active portfolio management, and on an open corporate culture geared toward performance. These are the areas where we are concentrating our efforts, and we’re convinced that this strategic approach will bear economic fruit.

What does active portfolio management mean to you?

Orienting the company toward growth markets and high-margin businesses in the specialty chemicals sector. We’ve already made tremendous strides down that road. We successfully concluded the largest purchase in our company’s history when we acquired the Air Products specialty additives business in the US. And while significantly smaller, the purchase of Dr. Straetmans, a family-owned business in Hamburg, was also a perfect fit for our strategy.

Can you imagine more acquisitions?

Can I imagine them? Sure. We want to keep growing, after all. To do that, our first step is to invest in our own business, expand our production, and tap into new markets. The second step is to keep investing strongly into research and development. And thirdly, we’re watching the markets and

THE ROAD TO PROFITABLE GROWTH

We’re working to increase the value of the company through a strategy based on three pillars: portfolio, innovation, and corporate culture.



BALANCED PORTFOLIO

Our active portfolio management and investment activities are hallmarked both by growth markets and by our clear character as a specialty chemicals company.



LEADING IN INNOVATION

Our research and development activities are geared toward intense collaboration with customers and partners all along the supply chain.



SUCCESS-ORIENTED CULTURE

Our corporate culture is based on trust, respect, and openness—paired with a diverse, international atmosphere.

Christian Kullmann became chairman of Evonik's executive board in May 2017.



keeping an eye out for opportunities. But at a relaxed pace—there's no rush. With the right fit and the right price, we'd be ready. But we're not looking to buy at any price, and a solid financial position is important to us too.

So will Evonik keep getting bigger over time?

Depends what you mean by 'big'. We want to be better—in terms of earnings, profitability, and innovation as well. But active portfolio management is about more than just acquisitions. We also have to consider divesting businesses if they no longer fit our strategy.

Which businesses are those?

Take the methacrylates business as an example. With businesses like this, success fluctuates strongly with the global market price of the product, so they can hardly meet our expectations when it comes to stable margins over the long term. In those cases we look at every possibility—including the option of finding a better owner.

You also want to grow research and development. In which fields?

We love chemistry, but our research is about more than just a love of science. The goal of our research and development is innovation—in other words, the successful marketing of new products. To this end we've defined six fields where we see exceptionally good opportunities for successful innovation: Sustainable Nutrition, Healthcare Solutions, Advanced Food Ingredients, Membranes, Cosmetic Solutions, and Additive Manufacturing.

Could you give an example of successful innovation?

Our Veramaris project, which we're pursuing together with the Dutch company DSM. The project revolves around the very specific omega-3 fatty acids used in salmon farming, where, up to now, fish oil and fishmeal have been the primary sources of omega-3 fatty acids. Each year some 16 million metric tons of wild fish are caught in order to produce fish oil and fishmeal. We worked with

to find an alternative route: We produce these omega-3 fatty acids using a fermentation process that starts with algae. That conserves resources, goes a long way toward helping combat overfishing in the world's oceans, and makes salmon de facto vegetarians. It's a powerful example of our innovative strength.

How do you measure that innovative strength?

Underlying each of the six innovation growth fields is a strategy with business objectives, market objectives, and business models, up to and including acquiring competencies. By 2025, we hope to earn an additional €1 billion in sales from innovations in these fields. Another indicator of innovative strength is the proportion of new products in our overall portfolio. About 12 percent of Evonik's sales currently come from products and applications that were developed in the past five years.

As the third pillar of your strategy, you mention corporate culture.

Yes, because the world, and with it Evonik's business, is becoming ever more complex. Issues such as digitalization, upheavals in trade policy and international relations, the changing working world, and demographic change are just some of the major challenges facing the company. This makes it all the more important to focus on values that equip us for the future.

What values do you mean?

The members of the executive board have set the course, and in the future we want to align the company with four central values: Performance, Openness, Speed, and Trust.

“Our initial steps have been promising. We still have a lot of ideas at Evonik”

CHRISTIAN KULLMANN



Evonik's company headquarters in Essen

And what exactly do these mean?

Performance means that we want to become the best and to make every effort in this direction—for our customers in our markets and in processes, and also in terms of costs. Openness means that we talk with one another instead of about one another—in a forthright, open, and spirited way that helps us become better. Through Speed we aim to reach our goal sooner by becoming faster in our actions and reactions, and at all events by making decisions more quickly in the future. And without the fourth value, Trust, our entire corporate culture would founder because everything we do is based on our ability to rely on and trust one another.

Why does a company need values at all?

In order to be successful, a company must develop values that make its activities meaningful and convey pride in collective endeavor, both internally and externally. On our way to becoming the best specialty chemicals company in the world, these common values are therefore a guide to how we want to develop and also tools to master the tasks of the future.

THE EXECUTIVE BOARD

THE TEAM AT THE TOP

Evonik is led by a four-member executive board. At the heart of our culture of management is a relationship of trust between the workforce and the management. To foster that relationship, the executive board adheres to three mutually reinforcing principles: a clear message, consistent action, and a spirit of collaboration with employees.



THOMAS WESSEL
Chief Human Resources Officer,
joined the company in 1979

UTE WOLF
Chief Financial Officer,
joined the company in 2006

CHRISTIAN KULLMANN
Chairman of the Executive Board,
joined the company in 2003

DR. HARALD SCHWAGER
Deputy Chairman of the Executive Board,
joined the company in 2017

PORTFOLIO MANAGEMENT

THE ROAD TO PROFITABLE GROWTH

Specialty Additives, Animal Nutrition, Smart Materials and Health & Care: These terms represent Evonik's four strategic growth engines—and fascinating prospects.



Specialty Additives

At home in paints, living-room couches, and motor oil, specialty additives can be found improving the properties of countless everyday items. Sometimes enhancing, sometimes augmenting a product's properties, additives are incorporated during the production process to achieve a variety of effects—whether a specific degree of hardness in cushions or just the right viscosity in lubricants. Demand for specialty additives is growing steadily, as they are designed to increase the value and durability of end products and to conserve resources in production to the greatest possible extent. And the profitability of the market makes it exceptionally attractive.

5–6%
market growth

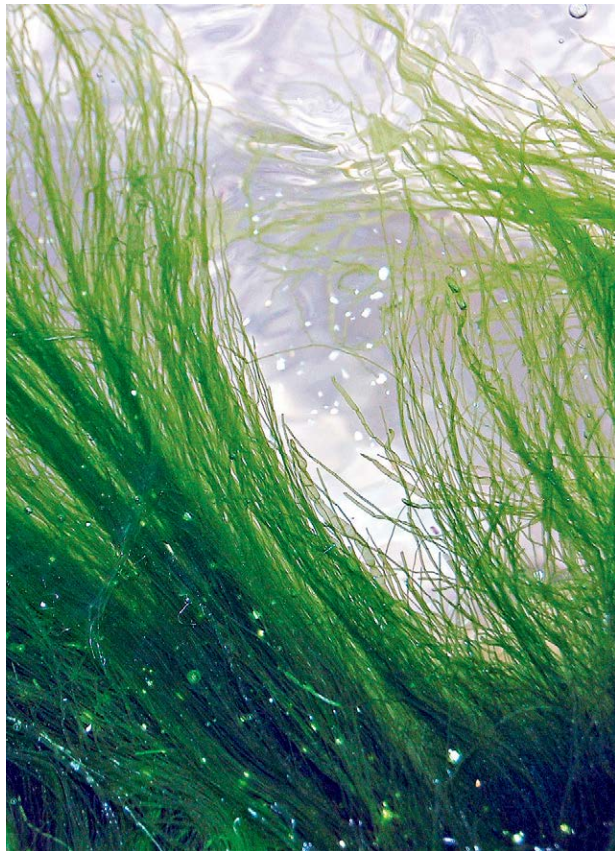
PRODUCT EXAMPLES:
Coating additives
Polyurethane additives
Oil additives

5–7%
market growth

PRODUCT EXAMPLES:
Amino acids
Omega-3 fatty acids
Probiotics

Animal Nutrition

Sustainable food production is one of the great challenges of our time. Increasing standards of living in emerging economies are driving the growth of global meat production, which, in turn, is raising both the demand for land and the emissions of methane gas from livestock. Evonik already has a number of solutions to address this development. Additionally, desire for greater food safety and quality and criticism of antibiotic use in animal nutrition are influencing the markets—yet another area where Evonik is hard at work, developing probiotics for animal feeds, manufacturing omega-3 fatty acids from natural microalgae to replace the use of fish oil and fishmeal in salmon farming.



Smart Materials

What we call “smart materials” are materials with custom-made properties that give them a role in optimizing products and product characteristics. One such material is silica, which is used in a wide variety of consumer goods. These small silicon dioxide particles are an important part of products such as toothpaste, paper, and modern tire treads. In tires the properties of silica particles reduce rolling resistance, which, in turn, reduces fuel consumption. Yet another example of a use for smart materials is 3D printing, where the materials involved have to have just the right qualities for printing. Here Evonik offers its high-performance polyamide 12, a polymer powder that makes faster, more precise 3D printing possible—even for complex components—and in that way fuels the growth of industrial applications for this technology.



4–7%
market growth

PRODUCT EXAMPLES:
Silica
High-performance
polymers
Membranes



Health & Care

5–6%
market growth

PRODUCT EXAMPLES:
Pharmaceutical polymers
Implants
Biosurfactants

The Health & Care growth engine encompasses products and services in the fields of pharmaceuticals, medical devices, cosmetics, and food supplements. One example of these is the use of pharmaceutical polymers that release medications at the precise location in the body where they are needed—at the right time. Health awareness is rising hand in hand with trends toward an increased emphasis on fitness and beauty. With so many people wanting to look young as long as possible, anti-aging products have long been a billion dollar market. Evonik supplies that industry with innovative active agents that take account of both regional differences and sustainability issues. Because consumers want to use cosmetics with a clean conscience, Evonik is increasingly gearing its portfolio toward actives made from alternatives to fossil-based raw materials.

A PORTRAIT OF THE NUTRITION & CARE SEGMENT

HUMAN NEEDS AT THE CENTER

While Nutrition & Care's markets offer first-class growth opportunities, they also come with unique responsibilities. And Nutrition & Care is ideally suited to take on both.

Nutrition & Care focuses on applications in the fields of health care, nutrition, personal care, and hygiene.



The Nutrition & Care segment helps meet basic human needs. The products of the seven business lines in this segment are found in the consumer goods we use every day, just as they are in health care and animal nutrition. While this focus on human needs carries with it a great deal of responsibility, it is also a tremendous source of motivation.

Nutrition & Care serves growth markets driven by factors such as population growth, increasing life expectancy, globalization, rising affluence, and a heightened awareness of health and sustainability issues. Examples here include sustainably produced animal proteins for a healthy human diet, high-quality system solutions for cosmetic, personal care, and cleaning products, and powerful materials for use in household goods. These applications make the segment one of the pillars of growth for the Evonik Group, serving as it does three of Evonik's four growth engines: Animal Nutrition, Health & Care and Specialty Additives. In order to remain successful in these attractive, highly competitive markets, Nutrition & Care strives to differentiate itself from the competition through its focus on the customer and innovative solutions. Highly developed technology platforms in areas such as biotechnology, silicone chemistry, oleochemistry, and catalysis are not the only contributors to that success, however—our dedicated, skilled employees and our global presence are key factors as well. Sustainability also plays an instrumental role in the segment's business. The solutions the segment develops here help decouple economic growth from rising resource consumption.

The aspiration of Nutrition & Care is to achieve and expand a position of leadership in its businesses through innovation, close customer relationships, and smart investments.

SELECTED PRODUCTS AND APPLICATIONS

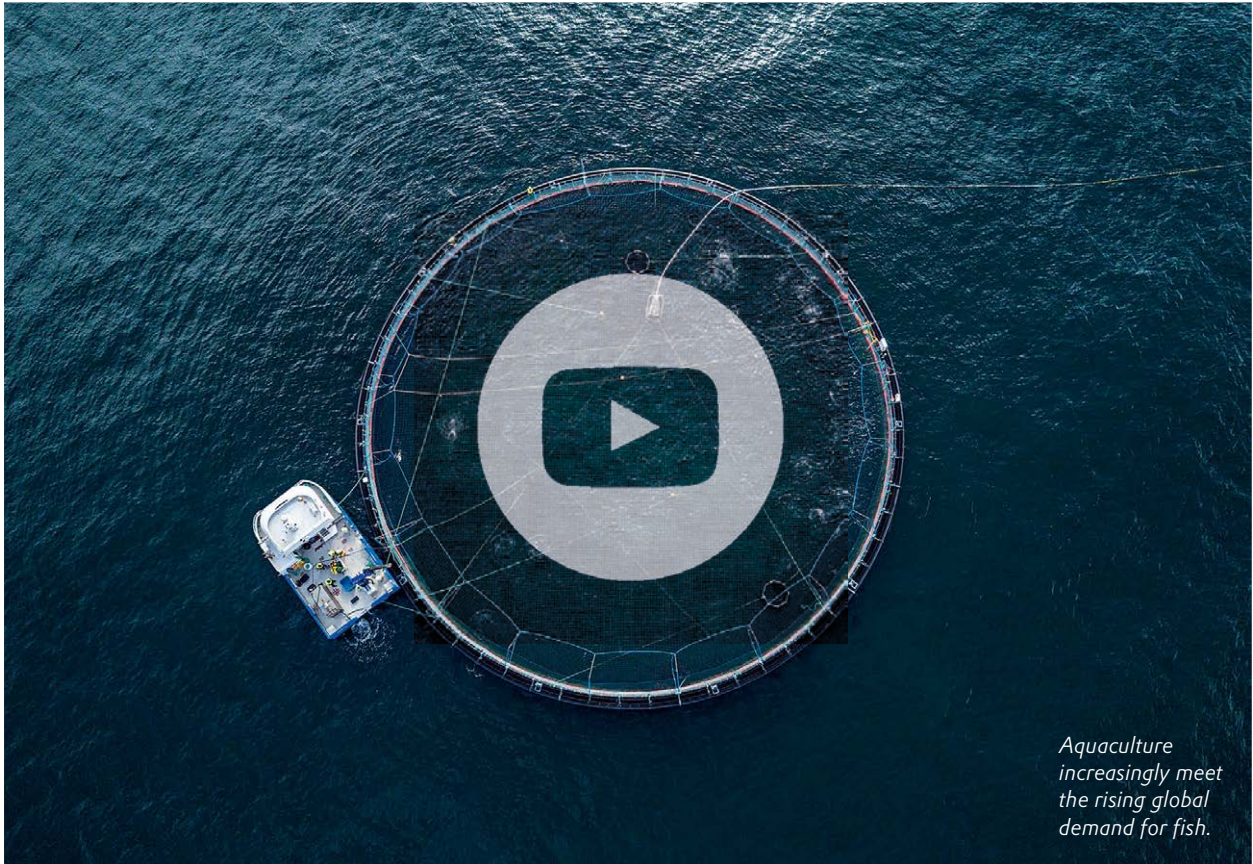
EUDRAGIT® helps active agents reach their targets.



Thanks to MetAMINO®, we're making poultry production more sustainable.



TEGOSTAB® makes mattresses more elastic.



SUSTAINABLE ANIMAL NUTRITION

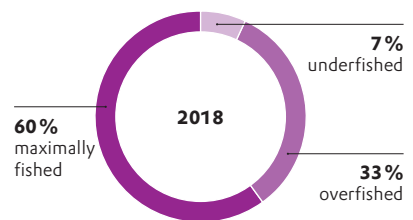
GOOD FOR PEOPLE AND THE OCEAN

A breakthrough in research aimed at protecting marine resources: Veramaris, a 50/50 joint venture with DSM, produces omega-3 fatty acids from natural marine algae—and makes salmon farming more sustainable in the process.

Demand for fish is on the rise, particularly in developing and emerging economies. Fish is an affordable food and an ideal source of protein for human beings. In addition, cold-water fish like salmon supply two omega-3 fatty acids that are important for human health: EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid).

Over the past few decades, fish consumption has risen to roughly 20 kilograms per person per year. Because the volume of wild-caught fish has been stagnant at about 90 million metric tons since the 1990s, however, growth in consumption has been met by aquaculture. According to estimates by the United Nations' Food and Agriculture Organiza-

COMMERCIALY EXPLOITED FISH STOCKS WORLDWIDE



Worldwide, 33 percent of the commercially exploited fish stocks are regarded as overfished and 60 percent as maximally fished. Source: WWF/July 2018

tion (FAO), the proportion of fish produced through aquaculture could reach 60 percent as early as 2030.

Fishmeal and fish oil play a key role in feeding farmed fish, with 16 million metric tons of sardines and other small fish caught—each year to produce 5 million metric tons of fishmeal and 1 million metric tons of fish oil—figures with scarcely any room to increase. After all, 30 percent of the world’s fish stocks are already overfished according to the FAO. Against this backdrop, efforts over the past few years have achieved massive reductions in the volume of marine resources used in fish feeds, making aquaculture decidedly more sustainable. The vision behind these efforts is to one day raise fish entirely without the use of marine resources. Or to put it less technically, to turn salmon into vegetarians. While dietary regimens that involve no fishmeal are already available, fish oil remains indispensable—for now. What makes fish oil so valuable for aquaculture are the EPA and DHA omega-3 fatty acids it contains. These are vital nutrients, both for salmon and for human beings, and neither species can produce them on its own—our only source of these compounds is our diet. Dispensing with marine resources entirely, however, will require an alternative source of EPA and DHA.

Working with Royal DSM of the Netherlands, Evonik has found a solution: algal oil, which contains EPA and DHA at a concentration of over 50 percent. Omega-3 fatty acids originate in marine algae, and move through the food chain until they end up in salmon and, ultimately, people. So why not just skip over the natural food chain and obtain the valuable omega-3 fatty acids from algal directly? Just one kilogram of algal oil contains the same amount of omega-3 fatty acids as 60 kilograms of fish.

In order to produce algal oil on a commercial scale, Evonik and Royal DSM have established a joint venture called Veramaris. By now Veramaris can

supply some 15 percent of the current annual demand for EPA and DHA in the entire salmon farming industry.

That would be more than just good for salmon and people—it would also help preserve the natural basis for human life and allow the aquaculture industry to grow sustainably. In this context, Evonik supports implementation of the United Nations’ Global Goals for Sustainable Development, especially goal 14, which deals with marine life issues. If conducted using as few marine resources as possible, after all, aquaculture will help supply the growing human population with valuable protein and, at the same time, protect marine life in all its variety.

SUSTAINABLY BRED SALMON TO BE AVAILABLE IN STORES

In collaboration with the Norwegian fish-farming company Lingalaks, the Kaufland retail chain is to offer its consumers salmon that has been fed on omega-3 algal oil rather than fish oil. The healthy and resource-efficiently produced salmon is to be available in the chain’s approximately 660 stores in Germany in 2019. Veramaris, the joint venture between DSM and Evonik, was the driver of this innovation in aquaculture. Veramaris promoted the dialogue between all stakeholders along the value chain, from aquaculture operators through exporters, right up to non-governmental organizations. Consumer demand for healthy and sustainable salmon has grown rapidly in recent years. As a result, Kaufland sees great potential in the collaboration with Lingalaks and Veramaris.



WELL-GROOMED NEEDLEWORK

Nearly one in ten Germans has a tattoo—in the US that figure is as high as one in five adults. Tattooed skin requires special protection, and Evonik knows how to provide just that.

Crown Prince Frederik of Denmark is said to have several of them. Heidi Klum and British singer Adele have one too. What once only decorated the skin of sailors or prison inmates has now arrived both in high society and in broad swaths of the population: tattoos. Unlike the more reckless tattoo wearers of yesterday, today's hipsters care about well-groomed, healthy skin—so that their body art will continue to look good without any unpleasant consequences. And our products can help in valuable ways.

Evonik has developed formulations that are used in seven different personal-care products for tattooed skin. Be-

fore the needle penetrates the skin, Evonik products are there to make the skin taut and to stimulate the epidermis to renew itself. Products like these can be used in applications such as lotions. After tattooing, they provide natural moisture and either strengthen the protective skin barrier or restore it. Our raw materials also produce a smoother complexion, which brings out the design and helps tattoos retain their colors for years to come—an important concern, especially for skin frequently exposed to the sun. And for those who later regret their tattoo, they can cover it up with camouflage makeup—yet another place you'll find Evonik products.



Whether in a wind turbine or in the soles of your gym shoes: materials from Resource Efficiency increase product longevity, performance, and durability in many applications.



A PORTRAIT OF THE RESOURCE EFFICIENCY SEGMENT

CREATING SUSTAINABLE VALUES

As they move toward greater resource efficiency, many industries are looking for ways to reinvent themselves. The Resource Efficiency segment has the solutions they need.

You'll find them in the paints and coatings industry, the automotive sector, and in sports and recreation applications: products and technologies from the Resource Efficiency segment are used in many different markets. A total of nine business lines deliver solutions for industrial customers who want their production to be more efficient or their products to be more sustainable. The opportunities and challenges these demands present are manifold, which is why the segment covers such a broad array of products and services.

Lightweight materials from Resource Efficiency, for example, are replacing metal parts in vehicles or, more precisely, in the body, chassis, interior, and engine. That does more than make cars lighter and more efficient: it also reduces fuel consumption and emissions. Plus, the segment's improved products make paints and coatings more durable and sustain-

able, improve low-resistance tires, and provide a foundation for industrial-scale 3D-printing technologies. Resource Efficiency also has a role to play in new construction and energy retrofits for existing buildings.

At the heart of the segment's work is an effective interplay between research, applied technology, production, marketing, and sales that paves the way for breakthroughs in core markets and entry into new ones. The strategy of Resource Efficiency addresses two of the four growth engines of the Evonik Group: expansion of its specialty additives business and of its smart materials platform. This is augmented by innovative growth businesses that allow the company to tap into new product and application areas.

The mission of Resource Efficiency is to help customers find new solutions and improve sustainability by offering them efficiency-enhancing products and technologies.

SELECTED PRODUCTS AND APPLICATIONS

ULTRASIL® helps tires save fuel.



ROHACELL® makes airplanes lighter.



DEGALAN® makes yogurt cups easier to open.

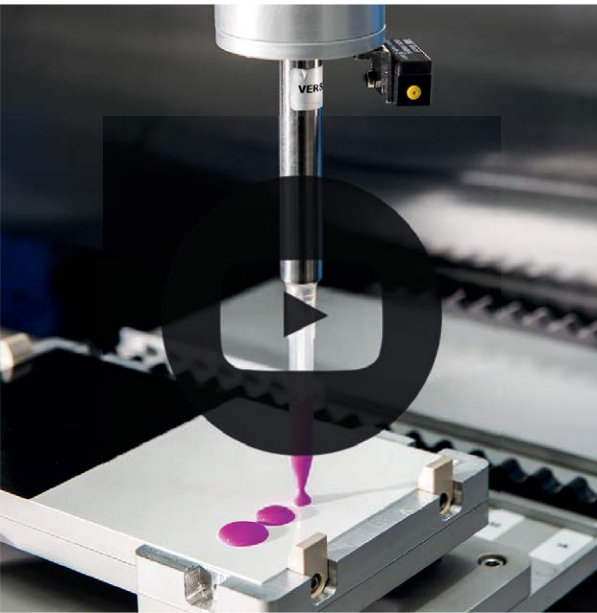
FULLY AUTOMATED TESTING OF PAINTS AND COATINGS

A FASTER ROUTE TO THE PERFECT PAINT

As protective shields and beautifiers, paints and coatings have to be true jacks-of-all-trades. And demands are on the rise. Which is why Evonik keeps working to improve products, and now operates a testing facility that shortens the road to the perfect formulation. The fully automated system blends and analyzes up to 120 samples a day.



Every paint and every coating can be reproduced in this high-throughput system at the press of a button.



Coating formulations are a combination of craftsmanship, science, and art.

Paints and coatings protect buildings from rain, keep the hulls of ships from rusting, make furnishings more attractive, and make cars resistant to dirt, UV radiation, and road salt. Coating materials have to meet a variety of demands depending on where they are used: one might have to be water-repellent, another might need to be water-based—or maybe both at the same time. Still another might need to be scratch resistant and either electrically conducting or insulating. Evonik offers a wide variety of raw materials that give paints and coatings these special properties. And that's not all: we work with and for manufacturers to develop new formulations. It's a task that requires a blend of craftsmanship, science, and art. After all, the different ways of combining ingredients are simply endless, with 10,000 permutations resulting from just ten types of pigments, curing agents, binders, and additives that make the coatings colorfast and protect them from corrosion. That puts industry between a rock and a hard place: on the one hand, there's no way to test the properties of every combination in the laboratory, but that, on the other hand, is precisely how new paints and coatings are developed. Evonik has found a way out of the dilemma: an innovative system at its Essen site makes and tests paints and coatings, aiding in the systematic search for the right ingredients in the right proportions. Blending and analyzing up to 120 samples a day,

this high-throughput plant was developed especially for Evonik and is unlike any other in the world.

A masterpiece of engineering, the plant consists of 52 elements that perform 30 different functions. Each of these functions represents a solution to a task such as applying a coating blend onto a plate. Located on a space of 120 square meters, the individual elements are connected via a system of rails for shuttles to transport raw materials, product blends, and coated plates from one station to the next. These stations are manned by 13 robots that carry out various work sequences: dispensing raw materials, blending these into paints and coatings, applying them onto plates, and testing the results for the desired properties. The system is fully automated and runs 24 hours a day until it finds the perfect coating.

Another advantage of the high-throughput installation is that it does not forget. Specially developed software saves all of the data, results, and formulations, which means that every paint, every coating, and even every intermediate can be reproduced at the touch of a button—the perfect starting point for future development. And Evonik's expertise grows with each and every test. For our customers, that means they can develop and market their new, innovative products faster than ever before.



40

*MILLION
different paints and
coatings are used around
the world each year.*

BUILDING AND PRESERVING

Thousands of cars cross the 18-kilometer Storebaelt Bridge each day. In addition to that strain, Europe's longest suspension bridge also has to withstand the elements, which is why Evonik protects its pylons.

Bridges in Denmark, parking garages in New York, and container terminals in Belgium all struggle against the same adversary: moisture. The porous structures of sandstone, brick, and concrete are especially susceptible to penetration of the masonry by water and pollutants, and if the moisture inside freezes, it will expand and produce cracks. Also, when water penetrates concrete, the interior steel reinforcements will rust, producing structural damage and jeopardizing stability. Protectosil®, a building protection agent from Evonik, can help. The force behind this process consists of functional silanes that can be tailored to any kind of weather and any kind of material. These silanes penetrate deep into construction materials,

where they prevent moisture from being absorbed. At the same time, they also allow moisture to escape, just as modern athletic clothing does. Treated surfaces also repel oil, remain stable in the presence of UV light, and, on top of all that, provide an effective barrier to graffiti. Evonik also offers special versions of its products that are virtually free of volatile organic compounds. In addition to the Storebaelt Bridge and the Chancellor's Office in Berlin, Evonik silanes have protected other buildings throughout the world over the course of the past few decades, including the Sydney Opera House, the Louvre in Paris, sidewalks in Times Square in New York City, and Princeton University in the US state of New Jersey.



Distributed by

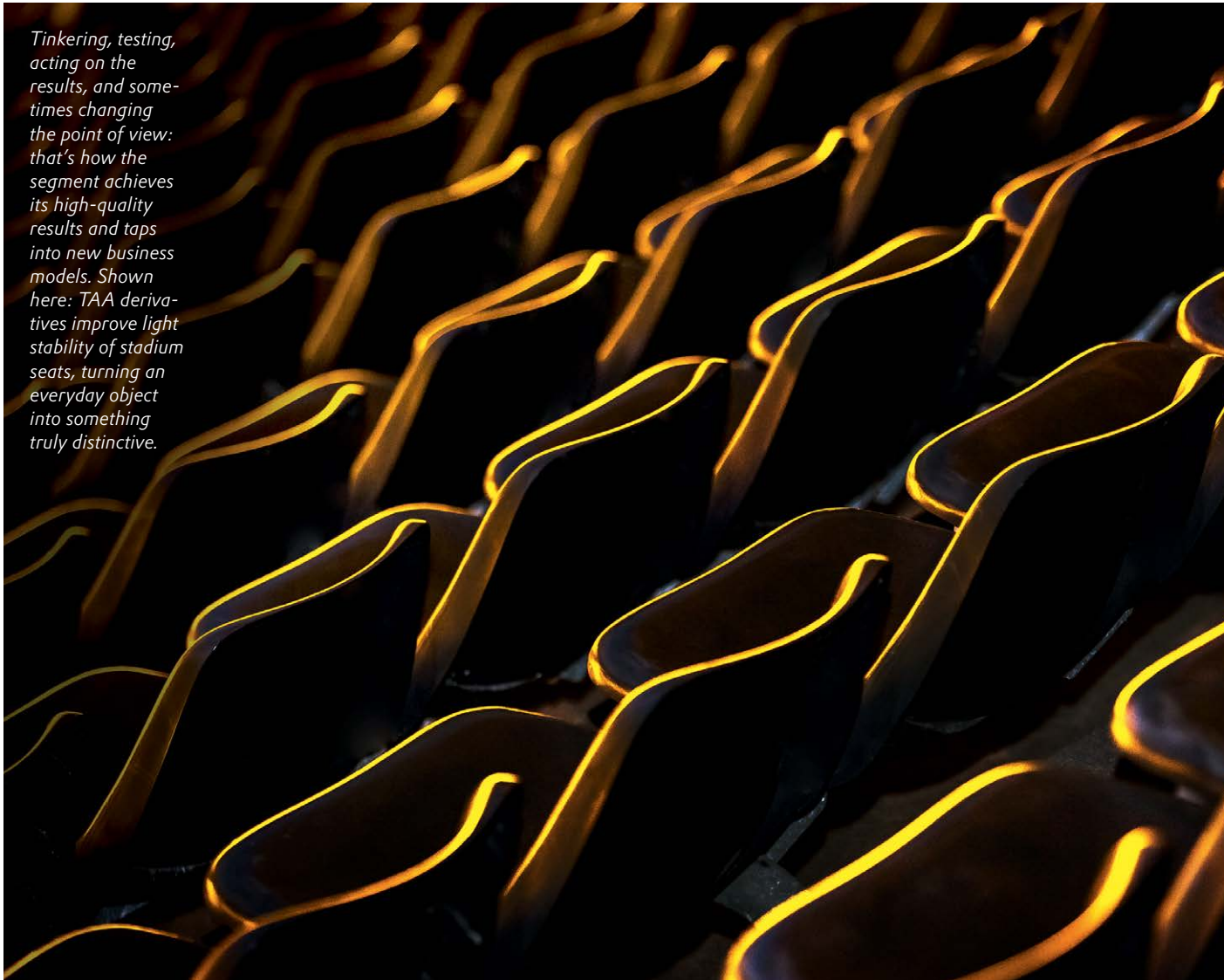
 Polymershapes

A PORTRAIT OF THE PERFORMANCE MATERIALS SEGMENT

DOING CHEMISTRY MORE INTELLIGENTLY

High-quality products and unusual ideas make Performance Materials a partner to customers all over the world.

Tinkering, testing, acting on the results, and sometimes changing the point of view: that's how the segment achieves its high-quality results and taps into new business models. Shown here: TAA derivatives improve light stability of stadium seats, turning an everyday object into something truly distinctive.



The Performance Materials segment is a leading provider of polymer materials and intermediates. Flexible plastics, exciting building exteriors, exceptionally quiet engines—the high-volume intermediates and customized solutions of this segment are often what make the difference in highly disparate applications.

At the heart of this success story are roughly 4,400 employees at over 20 sites who know what quality means, produce reliably good chemistry, and understand the needs of customers and consumers.

Performance Materials taps into new markets and sales opportunities with intelligent business ideas and services along the entire supply chain. Examples here include digital portals that enable direct dialog, benefitting customers when it comes to prices and services—an initial step toward a digital ecosystem. In another example, the segment also offers innovative, C4-based materials for the rubber, plastics, and specialty chemicals markets. These include DRIVERON®, which allows engines to run quieter and produce fewer emissions, and products in the ELATUR® family, which result in pleasantly soft polymers for use in popular applications like flip-flops. The segment’s TAA derivatives improve light stability of plastics such as those used in stadium seats. Our alkoxides enable biodiesel production.

The mission of Performance Materials is to “do chemistry more intelligently”, which means understanding chemical products, chemical and business processes, constantly questioning them, rethinking them, and designing them in innovative ways.



SELECTED PRODUCTS AND APPLICATIONS

It’s not just muffins that can rise soda-free with potassium hydrogen carbonate.



DRIVERON® makes engines run quieter and produce fewer emissions.



The plasticizer ELATUR® CH makes plastics more flexible.

ROBUST POLYMERS

KEEPING IT NICE AND SUPPLE

For decorative wallpaper, robust vinyl flooring, and more: Plasticizers are what make the PVC in these applications flexible, supple, and thus versatile. ELATUR® is the latest generation of Evonik plasticizers especially designed for indoor applications.

Polyvinyl chloride, better known as PVC, is highly sought after among do-it-yourselfers and interior decorators—and with good reason. Vinyl wallpaper with an embossed 3D structure can lend an appealing ambiance to any room and is extremely easy to apply. And if you ever need to replace it, you can simply pull it off of the surface without wetting it. Vinyl flooring is available in countless designs as well, offering deceptively realistic imitations of classic marble, warm wood, or polished stone. And polymeric flooring does more than simply look like these materials—it feels like them too. Embossed surfaces simulate the natural structure of wood and yield an anti-slip floor. Regardless of the look and feel of the material, the

advantages of vinyl never change: The surface is pleasantly warm and does an excellent job of muffling footsteps.

Plasticizers are what make all that possible. It is thanks to them that PVC, which is actually brittle and hard, can be turned into a soft, flexible material that stands up to moisture and to the constant back and forth of chairs.

Plasticizers act like a molecular lubricant, inserting themselves between PVC chains and allowing movement in what was originally a tightly packed, rigid structure whose chains now slide along and past each other.

It then comes as no surprise that plasticizers are among the most widely sold specialty chemicals in the EU. Evonik has been one of the leading plasticizer manufacturers for many years now. And with the latest generation of the ELATUR® family, the company is helping manufacturers of high-quality soft-PVC products develop long-lasting formulations with just the right degree of elasticity. As one of the foremost plasticizers on the market, ELATUR® CH is, in terms of quantity, one of the most important components of many soft-PVC products. Thanks to its exceptional properties, this molecule makes the crude PVC compound more flexible and, as such, easier to work with.

In order to produce PVC even faster and to make production more energy efficient, manufacturers often look to special additives such as quick-gelling agents. One highlight of ELATUR® DPT is its

13.5

*MILLION METRIC TONS
is the world's annual
demand for soft PVC.*



particularly favorable environmental profile, which it achieves even while improving the processing characteristics of soft PVC.

Researchers at Evonik Performance Materials are already at work expanding the company's plasticizer portfolio even further—for instance with products specially designed for use in materials subjected to extreme climate conditions. The goal is to produce technically outstanding products that are easy to handle and extremely safe, while offering the greatest possible benefit to customers and consumers.

Flexibility and versatility are characteristics that flooring owes in part to the latest generation of ELATUR® plasticizers from Performance Materials.

UP TO THE LAST MOLECULE

C4 chemistry enables processing of by-products of the oil industry right up to the last molecule and transforms them into high-value chemicals.

Whether as a propellant in hairspray, anti-knocking agent in gasoline, process raw material for the tire industry, plasticizer for PVC applications, or as a component of latex mattresses: The products of C4 chemistry can be found everywhere in our everyday life. However, their manufacture is anything but ordinary.

The name C4 stands for by-products of crude oil processing which contain four carbon molecules in their chains. In contrast to other types of production, C4 chemistry deals with a mixed set of raw materials from which diverse products

are manufactured. For some time now, Evonik has been able to master the processing of by-products using the fluid catalytic cracking method (FCC). These FCC-C4 gases are very difficult to process as they contain unwanted accompanying substances and impurities that can poison catalysts, for example. In Marl, Evonik has constructed a plant which can process these gases in such a way that they can be further processed as part of regular C4 operations. This means Evonik has ensured a broader base of raw materials.

→ [evonik.com/c4-chemicals](https://www.evonik.com/c4-chemicals)



A TEAM WITH A GLOBAL FOUNDATION

ACHIEVING MORE TOGETHER

Our employees throughout the world are the key to Evonik's success. That makes motivating them, developing their professional skills, and retaining them among our top priorities.

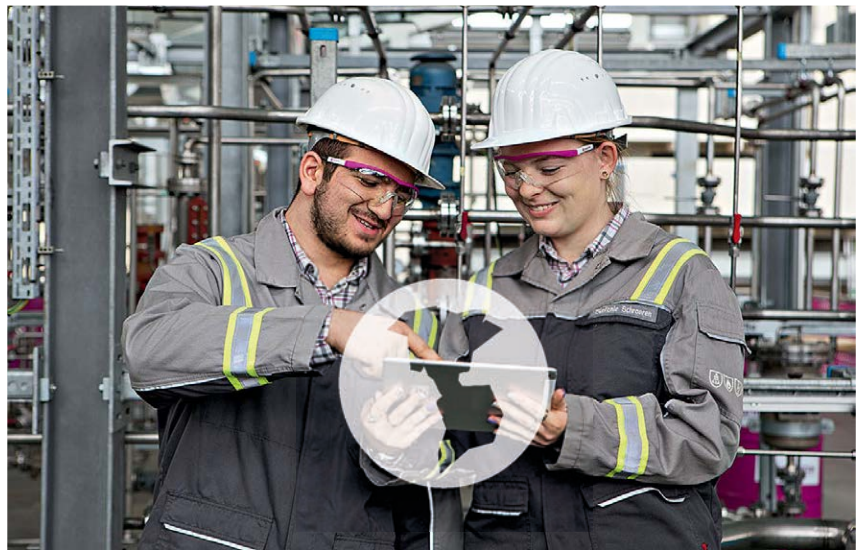
WELCOME TO EVONIK

Going Purple is Evonik's onboarding program for new employees.

While the first days on a new job are exciting, they often pose a challenge as well—for employees and their managers alike. To help people integrate into the company smoothly, Evonik's onboarding team has developed Going Purple. Going Purple is a program that provides the support that managers need to incorporate new employees, as well as colleagues who have transferred from another position within the company. This support is provided by welcoming individuals before they start their new jobs and by providing checklists, a mentor program, networking opportunities, and personal development training.

104

**NATIONALITIES
are represented in
Evonik's global team.**



VOCATIONAL TRAINING

More than 30 different career paths

All over the world, young people find their way to Evonik after successfully completing high school or university. In Germany alone, several hundred young people begin an apprenticeship with us each year. Here they become chemical engineering technicians, chemistry lab technicians or industrial mechanics. Those are more than 30 recognized professions and cooperative study programs that we offer as part of our training services. Further, as a result of our digitalization strategy, we have been

equipping all of our apprentices with tablets since 2017. Therefore we are able to offer an individualized, hands-on learning experience by providing an environment which integrates work and education. After all, good training programs keep Evonik ready for the future and serve as the foundation for developing people early in their careers. As of the end of 2018, we had 1,800 apprentices at 16 sites in Germany. At roughly 6.8 percent, our training rate is once again higher than Germany's national average.

3 QUESTIONS FOR THOMAS WESSEL

“Diversity helps us foster creativity”

Mr. Wessel, what are the hallmarks of Evonik as an employer?

Evonik combines diversity, reliability, and creativity—and that is every bit as true for our nearly 4,000 products as it is for our employees. We have operations in 100 countries throughout the world, which translates to a huge range of career and development opportunities in technology, the natural sciences and administrations. Evonik is also known for its excellent apprenticeships in many occupations, for attractive remuneration systems, and for encouraging employees to find the right work-life balance.

What do you expect from prospective employees?

As a specialty chemicals company, our employees' ideas are our lifeblood. We need exceptionally well-trained men and women if

we are to remain competitive on the international stage. We're looking for non-traditional thinkers who have the courage to take the road less traveled—people who are curious, creative, and innovative, and who have an international mindset and approach.

To what extent is employee diversity a key to success?

Diversity helps us foster creativity, question established ideas, and better understand the needs of our customers. But when we talk about diversity, we're not just talking about ethnicity and gender. A variety of disciplines and a range of experience are just as important. We want to utilize the full spectrum of skills and perspectives that our employees contribute to the company—doing so drives our ability to compete and our innovative strength.



“As a specialty chemicals company, our employees' ideas are our lifeblood.”

**THOMAS WESSEL,
CHIEF HUMAN RESOURCES
OFFICER AT EVONIK**

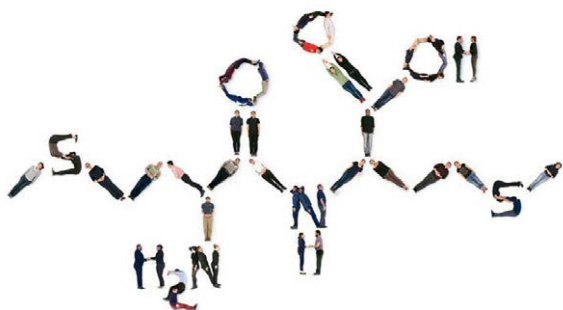
OUR EMPLOYEES, OUR AMBASSADORS

#HumanChemistry offers insight into day-to-day life at Evonik.

Standing behind our powerful products are our powerful employees—they are the molecules of our company. And on the Evonik Careers page online, they are also our ambassadors, posting their thoughts and photos in the section #HumanChemistry. Here they share news and personal experience of events, tradeshows, meetings, and more. This is where employees from many different countries and disciplines give a face to our specialty chemicals business.

→ careers.evonik.com

→ [check out our instagram-channel:
instagram.com/evonikofficial](https://www.instagram.com/evonikofficial)



Daniel
21. FEBRUAR 2019 16:10

Congratulations to our winning team! Team "Visioneers" with members from India, Mexico, China, Taiwan and Russia had great ...MEHR

#HumanChemistry #Chatbot
#CreationLab #WBD #DiversityWins
#Visioneers

♥ 3



Ricarda
21. FEBRUAR 2019 13:33

THUMPS UP FOR 2019!

#HumanChemistry #Chemistry4People
#EvonikPerformanceIntermediates

♥ 4

14.7

YEARS: The average amount of time that our employees stay with the company.

41

PERCENT: The rate of participation in the Share.2017 employee stock purchase program in Germany—a new record. And at 53 percent, China even set a new global benchmark.

85.2

PERCENT of our employees participated in the latest regularly scheduled employee survey. This opportunity to provide feedback has allowed our employees to play an active role in shaping the company's development for many years.



WORK-LIFE BALANCE

For years, our human resources policies have accommodated our employees' needs for a balance between work and personal life, and we now offer corresponding initiatives for over 94 percent of our employees worldwide. These initiatives include flexible working hours that encompass a variety of options for working part-time or from home. In Germany, we also provide support for employees caring for children or close relatives. Our dedication to this issue has been documented by the "career and family" certificate, which we have now been awarded for the fourth time.

Nurturing talent...

... and empowering people: Evonik seeks to develop talent from within its own.

Our talent management program aims to develop high-potential employees for key positions across hierarchies, roles, and organizational units. Fostering and developing talent mainly focuses on the job and is supplemented by development tools and training. We use a structured process to ensure the identification of potential and strategically develop it. Regular human resources planning conferences serve as a platform to enable a Group-wide exchange of talent, vacancies and assignments. Further, we develop career plans with

our employees. These may lead to future roles as managers, specialists, or project leaders, depending on Evonik's needs and the individual employee's competencies and aspirations. Alongside on-the-job development measures individual plans may include additional support such as feedback, innovative dialogue formats, business school programs, and other training formats, for example, online, blended or traditional classroom training. The guiding principle behind the program is that strong characters lead to strong managers.



HONORING ACHIEVEMENT

The success of our company is based on a healthy, performance-oriented mindset and on the individual motivation of each and every employee. Fair compensation commensurate with an individual's performance is every bit as central to our success as our annual employee performance and development review between employees and their supervisors. Our remuneration systems are designed to be competitive in the respective markets, both for specialist and for management positions. On the basis of assessment criteria that are uniform throughout the world, they put an emphasis on performance-related compensation. For large parts of our workforce, compensation also encompasses variable components tied to the company's economic success and individual performance.

OFFERING PROSPECTS

Evonik and the Evonik Foundation offer support for school leavers who are not yet ready for an apprenticeship. The Career Launch program, which was created by social partners who collaborate with the chemical industry, offers prospects to those people who would otherwise leave school with no chance on the job market. The program allows them to participate in a long-term, compensated internship where they become familiar with careers in technology and the natural sciences. Participants also receive technical assistance and support from social workers. The program has been expanded for refugees, who receive language instruction as well. In 2019/2020, Evonik is taking part in the Career Launch program for the 19th time.



The future of work

Whether the discussion is about digital solutions for production and technology or agile working in flexible teams, the digital transformation opens great opportunities—and creates immense challenges for the entire industry. #HumanWork provides concrete business examples illustrating where digitalization creates added value and how it impacts employees. Evonik offers New Work Labs that give employees an opportunity to play an active role in issues of Work 4.0 issues and to try out unconventional approaches to the professional world of tomorrow's world of work.

“Discovering and designing the future of work—that’s what New Work Labs are all about.”

**SARAH
DITTRICH-SCHLEGEL,
CORPORATE HUMAN
RESOURCES**



“We will never be the best specialty chemicals company in the world without putting people first: #HumanWork.”

**NILS GLEIM,
EVONIK DIGITAL**

INTERVIEW WITH CHIEF DIGITAL OFFICER HENRIK HAHN

“WE’RE NOT PURSUING DIGITALIZATION FOR ITS OWN SAKE”

When it comes to the work of tomorrow, Evonik sees itself as a pioneer in the chemical industry. This is why the company has a team modeled on a startup—outside of corporate headquarters and with a great deal of freedom—to develop digital solutions and concepts, both on the company’s behalf and with the company’s input.

Dr. Hahn, Evonik is a successful player in the specialty chemicals industry, it has highly qualified employees, and its products are in demand the world over. So why enter the digitalization business now? What do you expect that to achieve?

Evonik is taking on digitalization because we want to be successful in the future too. I’m convinced that digitalization is going to impact every person and every company in the world—no matter what country or industry you’re in. Evonik aims to adapt to that reality early on so that we can play a meaningful role in shaping the process of change. That strategy will allow us to keep pace with the competition and retain our innovative strengths. At the same time, however, we are well aware that digitalization is all about human beings, and our #HumanWork hashtag distills that philosophy down to its essence (see page 41).

You say we want to play an active role in shaping these changes. What does that look like in the specialty chemicals industry? It’s not like you can replace the molecules in Evonik’s chemical products with digital versions.

Digitalization projects at Evonik are in fact aimed at a different goal, one I like to call a “user-centric

approach”: Traditionally, the chief concern in the chemical industry has been to deliver products to its customers safely, reliably, and at a consistent level of quality. But even in the chemical industry, the question is no longer going to be just about what we produce, but increasingly how we interact with our customers. And we certainly could offer more in that respect: Custom solutions, for one, in the form of all-in-one packages that meet an individual customer’s needs as precisely as possible. The object is to make it easier for our customers for their part to develop new or better-performing products.

What are you picturing when you say that?

This could be, for example, additional expert advice in the form of specific product recommendations, or offers of joint development of innovations or industry solutions. For that, however, it is essential to enter into direct and close collaboration. After all, we want to do a better job of understanding—and meeting—our customers’ needs and wants going forward. Digitalization opens a lot of new opportunities for doing that. In other words, it’s ultimately going to help us provide comprehensive support for our customers’ success. All of this is also well in line with our new corporate values.





ABOUT DR. HAHN

Henrik Hahn is a process engineer who began working at Evonik in 1999 and has been responsible for its digitalization strategy since 2016. After joining the company as a process engineer stationed in the US and Belgium, he moved into various management positions in the areas of technology and innovation. His assignments have included establishing and managing a corporate startup for developing and

producing lithium-ion battery components. Even while pursuing his Ph.D. in rheology and fluid mechanics, he was fascinated by digitalization in the form of data analysis and modeling. As part of his degree in economics, he grappled with information economics, studying questions of supply chain management and applying mathematical game theory to shape cooperate strategies.

“Evonik will make €100 million available for digitalization between now and 2020.”

**HENRIK HAHN,
CHIEF DIGITAL OFFICER**

Are you saying that industrial companies of the future will do more than just manufacture products—that they’ll also act as service providers for their customers?

For us, this trend is not exactly new. On the other hand, the production of physical products will naturally remain a core function of the industry. It’s just that digitalization opens up so many more possibilities. It gives companies a better understanding of what they can do and what others would like to see them do. That runs the gamut from new technologies and new business models, all the way up to new opportunities for collaborating in production and sales. Evonik wants to make a positive impression on future customers by offering them extra added value—a real advantage for their work. It’s always all about the prospect of value. Our customers ask themselves questions like, how will a certain product or a certain service benefit me? What value does it offer me personally? That’s why focusing on the customer is a key issue for me.

EVONIK DIGITAL GMBH

When it comes to digitalization, Evonik sees itself in a pioneering role in the chemical industry. It therefore founded Evonik Digital GmbH in early 2017. This subsidiary, which has been given considerable freedom to develop and flesh out unusual ideas, intends to focus its efforts on new products and services that will help Evonik support the success of its customers. Henrik Hahn is head of the management board of Evonik Digital GmbH and coordinates Evonik’s digitalization activities in his role as chief digital officer (CDO).

What has Evonik achieved so far?

In 2016, Evonik established its own interdisciplinary team that subsequently developed into Evonik Digital GmbH. This team is trying to advance digitalization at Evonik. Due partly to the creative latitude we offer—similar to that at a startup—we are viewed as pioneers by many people in the industry. We aim, on the one hand, to help our customers help themselves and, on the other, to implement new digital approaches to business within our own company. The result is clear: We at Evonik have long recognized the importance of this topic for our sector, and therefore for the company. And that is by no means restricted to Germany but applies across all regions.

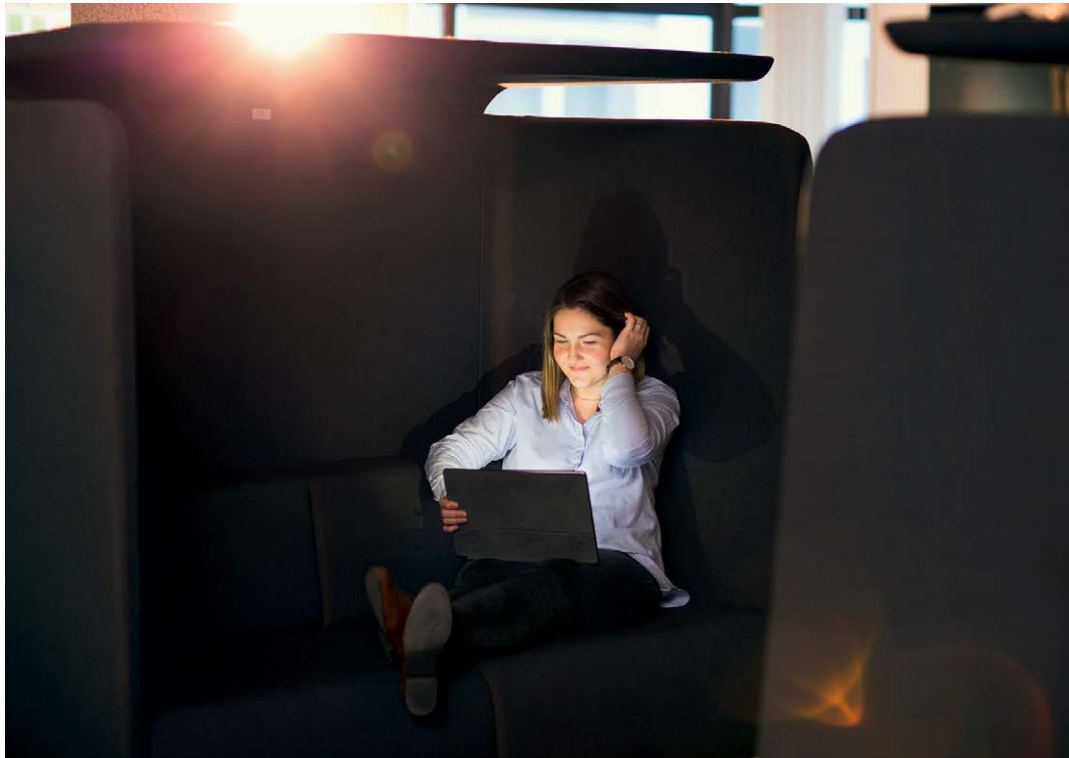
Could you name a few real-life examples? What exactly do these experts do?

Let’s go directly to China. With the opening of our flagship store on Alibaba’s 1688.com online trading market for business customers, we’ve opened up new access to our products. We expect that this will allow direct and fast exchange with small and medium-sized companies. Another example of e-commerce, still in the test phase, is our industry-wide OneTwoChem platform solution for efficient initiation and conclusion of chemicals transactions at short notice. In production and technology, Technology & Infrastructure—using the internally developed e-DX methodology—ensures a standardized approach throughout the company for digitalization of chemical plants and also for specific implementation plans. Their aim is to show how processes run in an ideal plant and the technologies needed, taking the relevant organizational aspects into account. But although our production facilities are brimming with valuable data, measured values, and process information, it is people who are at the heart of digitalization. To keep this always in mind, we have introduced the #HumanWork.

How does Evonik intend to keep track of all the different aspects of digitalization?

Digitalization isn’t a transformation that just happens overnight. While the changes are relentless, they do come one step at a time. What we’re talking about here is a comprehensive process. To

Modeling new ways of working is a key aspect of the #HumanWork philosophy.



coordinate that process throughout the entire company, Evonik has created the position of CDO—the chief digital officer—and has entrusted me with that role.

If you want to earn money from digitalization, you have to spend some first. What is Evonik’s position on that?

Evonik has made €100 million available for digitalization—money intended for developing and testing digital technologies and for building our expertise through 2020. Ultimately, our activities are going to have to pay off for the company as a whole. We’re not pursuing digitalization for its own sake—we’re doing it to help shape developments. To that end we want to inspire our employees, so that we can make Evonik both a successful specialty chemicals company and a good and attractive employer.

THE CULTURAL SHIFT THAT EVONIK NEEDS

What is behind #HumanWork?

The #HumanWork philosophy supports the cultural shift that Evonik needs if we are to excite our employees for the journey into the digital future and to encourage them to play an active role in that transformation. In other words, #HumanWork stands for a modern work environment geared toward the future.

The philosophy is hallmarked by visibly modeling new ways of working and by what we call “digital passion.” An important prerequisite for that is a corporate culture that is open to change, capable of learning, and geared toward performance—one in which continuous feedback, experimenting, flexible working models, and teams that can make their own decisions are simply part of daily life.

THE RECIPE FOR INNOVATION

Research and development are important drivers of profitable growth, and their foundation rests on our culture of innovation, with its ambitious goals, clear strategy, and inspiring work environment. We provide the freedom employees need to be creative. We cooperate across departments, with customers, and with our external partners. And we incentivize new approaches so that good ideas can be turned into marketable innovations.

INNOVATION GROWTH FIELDS

We focus our innovation efforts on six fields oriented toward the Group's strategic growth engines.



Sustainable Nutrition

Products and services for sustainable animal nutrition



Healthcare Solutions

Materials for implants and innovative drug formulations



Advanced Food Ingredients

Health-enhancing substances and nutritional supplements



Cosmetic Solutions

Products for cosmetic applications and formulations



Membranes

Expansion of efficient gas separation technologies



Additive Manufacturing

Products and technologies for (industrial) 3D printing



SOLUTIONS FOR TOMORROW'S PROBLEMS

If we are to make assessments about tomorrow, we have to keep our eyes on the events and developments of today that are setting the course for the future. Our Foresight team does this by studying a number of indicators and developing possible future scenarios. This process involves the application of established methods, such as exploratory scenario planning, which involves simulating the hypothetical consequences of events, and STEP trend analyses, which look at wider sociocultural, technological, economic, and political changes. Innovative workshop concepts complement those techniques, as does Foresight Radar, an online tool that the Foresight team uses for modeling issues relevant to the company's future. The team makes the tool available to all Evonik employees as a source of inspiration and, consequently, innovation.



IN-HOUSE ENTREPRENEURS

When we come across a good idea coupled with an entrepreneurial mindset, Evonik honors that combination with its Entrepreneurship Award. The competition brings together experts from all over Evonik and gives them an opportunity to work on a project that goes beyond their own individual parts of the company. The winning team then works at Creavis, our strategic innovation unit, where it has one year—with financial support—to develop the idea to the point of marketability.

COOPERATING WITH RESEARCH PARTNERS

Innovation at Evonik also means cooperation. We work with our customers and with numerous partners in science to find creative solutions, with the aim of introducing our company to the latest findings in the fields of chemistry, biology, and physics. We pursue unconventional means to achieve those ends, such as the Evonik Call for Research Proposals, which poses highly specific questions to the scientific community, where it has garnered considerable interest. In order to strengthen our already large network of top international researchers and universities, we regularly host the Evonik Meets Science forum in Germany, Asia, and the US. Here we share findings with leading scientists from a huge array of disciplines and institutions.



EVEN BETTER TOGETHER

Strategic partnerships link us to leading universities in Germany, the US, China, and Saudi Arabia, as well as with Singapore's National Research Foundation. Evonik also has a preferred partnership in the form of a framework research contract with the Technical University of Munich.



Evonik's in-house innovation award is presented annually to reward research achievements by its employees.

Shining a spotlight on innovation

A new product? An improved process? Or a technology that offers solutions to challenges in the specialty chemicals industry? Evonik honors outstanding innovations in chemistry that move the company forward, conferring its in-house innovation award in two categories each year. A jury consisting of the chief innovation officer and segment innovation managers nominates three teams in each category. The winners are decided on the evening of the awards ceremony.

1,518

PARTNERS
have cooperated with
Evonik on publicly funded
projects since 2007.

4.4

PATENTS
a week were registered
by Evonik in 2018.

INSIGHTS INTO INNOVATIVE TECHNOLOGIES

Evonik engages in venture capital activities in order to secure access to innovative technologies and new businesses. We selectively invest in specialized technology funds and startups that have a strategic relationship to the company. Doing so offers us insight into innovative developments in their earliest stages. We work with our partners to develop new products and technologies, accelerating our innovations in the process.

25

NUMBER OF COMPANIES in which Evonik is an investor.* We have been active in venture capital since 2012.

For example Evonik has invested in a startup that has developed a biotech platform for producing predictably high yields of peptides at a fraction of the cost. While peptides are primarily used as active agents in pharmaceuticals and cosmetics, peptides and proteins represent a commercially interesting class of molecules for use in a variety of other applications as well. The corresponding markets are the focus of our Health & Care and Specialty Additives growth engines, making them an ideal complement to our strategic alignment.



Inspiring creativity

As Evonik's strategic innovation unit, Creavis concentrates on medium- and long-term innovation projects that support the company's growth and sustainability strategy while tapping into new business opportunities. Creavis researches transformative innovations, taking economic, environmental, and social concerns into account as part of its portfolio management. The unit also identifies areas of future interest and serves the company as an internal incubator.

PROJECT HOUSES: BUILDING EXPERTISE

Creavis project houses provide a home for innovation projects that span multiple organizations or that represent an opportunity for Evonik to develop its expertise. Experts from the organizational units involved in a given project house generally come together for three years to collaborate on the development topics being pursued by their project house. While the projects and technologies developed there are typically marketed by an operational segment, another conceivable approach is to develop a competence center or an internal startup. Evonik has established a total of twelve project houses since the year 2000.

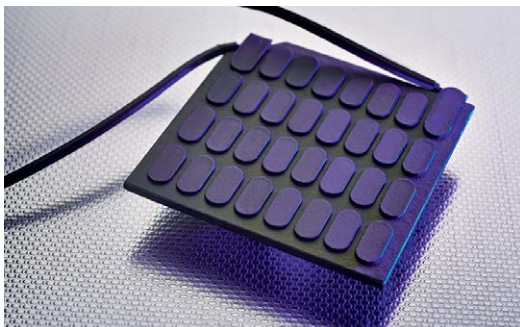


From the lab to the market

Creavis projects support development in operational units, which helps Evonik grow and tap into new fields of business. The following three examples illustrate how this works:

GUILT-FREE INDULGENCE

As sweet as sugar but with only half as many calories: In addition to its use as a sugar substitute in confectionery products like candy and chewing gum, isomalt is also suitable as a sweetener for diabetics. And Creavis has optimized an isomalt manufacturing process. A joint venture between Evonik and Rajburi Sugar of Thailand began producing this alternative sweetener in early 2017 using the now patented process developed by the Creavis team. The application of biotech methods has reduced the number of steps required and increased the final product yield relative to traditional methods.



ENERGY FROM WASTE HEAT

Germany produces several hundred terawatt hours of waste heat each year. While what are known as thermoelectric generators or TEGs can convert heat to electric energy, thereby making use of the heat generated by industrial processes, these generators are expensive and complex to make. A Creavis team has now achieved significant improvements in how TEGs are produced and implemented, making waste-heat utilization feasible for industrial processes where it had not been an option before. Their accomplishment has been recognized with the German Sustainability Award in the Research category.

SPECIALTY CHEMICALS FROM CO₂ AND GREEN ELECTRICITY

In collaboration with Siemens, Creavis is working on converting carbon dioxide (CO₂) into specialty chemicals using electricity from renewable resources. The team intends to do this using electrolytic and fermentative processes as part of Rheticus, a joint research project officially launched in January 2018. An initial pilot plant will begin producing chemicals such as butanol and hexanol by 2021—each of which are starting materials for prod-

ucts such as plastics and nutritional supplements. Production of other specialty chemicals or fuels is conceivable as well. What we know for certain is that the Rheticus platform is a far more cost-effective, environmentally compatible method of manufacturing chemical products than has been available up to now. Some 20 scientists from Creavis and Siemens are working on the project, which is receiving €2.8 million in funding from Germany's Federal Ministry of Education and Research.

→ [evonik.com/rheticus](https://www.evonik.com/rheticus)



Evonik is a powerful company and a powerful brand. And just as chemistry plays an omnipresent role in our day-to-day lives, the social commitments of the company can likewise be found everywhere.



BRINGING SPECIALTY CHEMICALS TO LIFE

OUR OBJECTIVES

Engaging with society is an important means of brand communication at Evonik, generating awareness and fostering understanding and close relationships. Through its cooperative ventures in athletics, education, and culture, Evonik hopes to foster a society that is both vibrant and diverse. To that end, we aim to be present in numerous contexts at once and be a part of people's daily lives. We turn to business partners, employees, and regional target groups, among other sources, to find reliable partners, to present ourselves as an attractive employer, and to strengthen our regions.

THE RIGHT PARTNERS

Evonik is involved with a large number of institutions, projects, and talented individuals that touch people in unique ways, engaging them and expanding their horizons. Enjoying a close bond based both on the content of their projects and on fundamental convictions, Evonik and its partners pro-

vide mutual support for developing their potential and for helping individuals take their strengths to the next level. Evonik largely selects partners from three areas:

SPORTS reinforce social cohesion. Here we present ourselves as a source of constant, reliable support, helping our partners develop their potential whether at the recreational or elite levels.

EDUCATION is the key to a successful future. As specialists in our respective fields, we hope to inspire and nurture children, young people, and university students with our own enthusiasm for the natural sciences.

CULTURE questions assumptions and takes us into uncharted waters. With a focus on our aptitude for self-renewal, our cultural sponsorship activities highlight work that is fresh, courageous, and creative.

ONE EXAMPLE OF OUR SOCIAL COMMITMENT

Promoting culture—and learning from the past

Evonik's support for the pop-up monument created by the Jewish Museum of Frankfurt was more than just financial—we contributed to the content as well.

Underlying the pop-up monument is a unique art project: The Raumlabor group of architects designed the transparent, walk-in bubble, which stood on Willy-Brandt-Platz in Frankfurt for ten days. There it served as a venue for numerous events hosted by the Jewish Museum, with which Evonik has partnered for years. Against that backdrop, Evonik's involvement was not to remain limited to financial support. "We

wanted to engage with the content as well," says Markus Langer, who directs Brand Communication for Evonik. Over 100 Evonik apprentices accepted the invitation to the pop-up monument to grapple with issues of discrimination, of standing up for democratic values, and of the history of the company for which they now work.

Why? Because Evonik's predecessor companies participated in the crimes of the Nazis—using forced labor, for instance. "For a long time, our predecessors ignored their responsibility to humanity," explains Dr. Andrea Hohmeyer, the head of Evonik's Corporate Archives. "Today we're facing that responsibility." And that includes dealing with the past openly.

"It's an excellent idea," says 20-year-old Ali Hadron, who has begun training as an industrial mechanic at the Darmstadt site.

"I'm impressed that other employees would educate us like that about the company's history."



A temporary installation for the Jewish Museum of Frankfurt, the pop-up monument served as a gathering place for music, literature, and dialog right in the center of Frankfurt. Evonik provided the museum with support for this project.



BVB is synonymous with emotionally charged soccer. The south terrace is the largest standing-room only area of any stadium in Europe.

PARTNERSHIP

THE PERFECT ONE-TWO PASS

Evonik and Borussia Dortmund: a good team—on the field or off.

A special partnership has connected the company and the soccer club since 2006. The name Evonik did not come into being until 2007, and the Borussia Dortmund soccer team—BVB—helped make that name familiar to audiences across the globe. BVB welcomes more fans to its stadium than any other soccer club, with an average of over 80,000 people attending every game in league play, and millions of soccer enthusiasts the world over watching the team in yellow and black. Through its partnership with BVB, Evonik has again proven its creativity, airing imaginative and, in some cases, award-winning ads and commercials that have achieved cult status among many fans. When it comes to their brand identities and values, the specialty chemicals company and the soccer club are not really all that different: Both emphasize creativity, customer loyalty, and commitment. The two have partnered to create the successful BVB Evonik Soccer School, which has been keeping over 12,000 children on three continents in



A good team even off the field: Evonik and BVB

shape since 2011—and not just in the sense of athletics. Team spirit and a healthy diet play a big role here too. As one of the most important strategic partners of the only publicly traded soccer club in Germany, Evonik is now in a long-term relationship with Borussia Dortmund or, to put it in the words of the two companies' slogans: "Power To Create" meets "True Love."



A LIKABLE EMBASSADOR

Borussia Dortmund players are greeted with enthusiasm whenever they travel abroad. Whether they are playing in an international competition or on the tours the team takes every summer, whether they're in Asia or the Americas: the traditional old soccer club is welcomed with open arms. That makes the BVB a likeable ambassador for Evonik, opening doors all over the world. In Singapore, offices for Evonik and BVB are even housed in the same building.

A LONG TRADITION

170 YEARS OF EXPERTISE IN CHEMISTRY

While the Evonik brand has only been in existence since 2007, the historical roots of the company go all the way back to the first half of the 19th century.

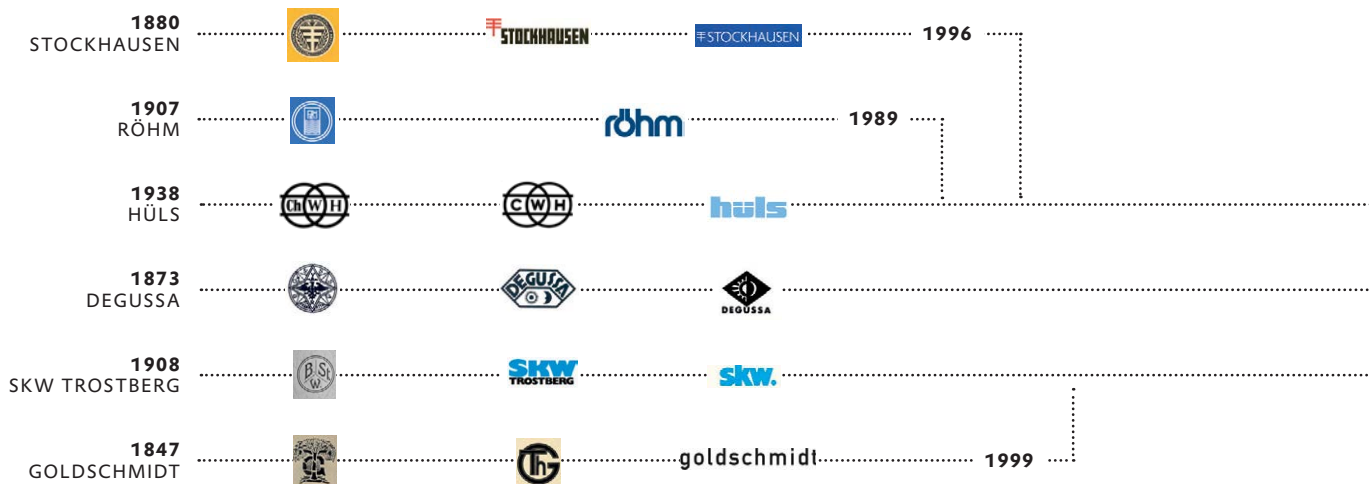
Evonik’s predecessors came from two different businesses: chemicals and mining. The mining business comprised the former Ruhrkohle AG, or RAG, which was founded in 1968 in Essen as a centralized hard-coal-mining entity. In 2003 the company was split into two, an independent mining group and an independent industrial group focusing on the fields of chemistry, energy and real-estate. At that time, a law was passed to regulate the financing, and ultimately, the closing down of all hard-coal mines in Germany in the year 2018. The chemical business comprised the (new) Degussa AG, which was formed in 2001 by the merger of several chemical companies, all steeped in tradition. One of these was Roehm, founded in Esslingen near Stuttgart, which had relocated to Darmstadt in search of a larger site. For similar reasons Goldschmidt company had left Berlin and moved to Essen a few years after its creation. Only

Stockhausen remained at its original site in Krefeld.

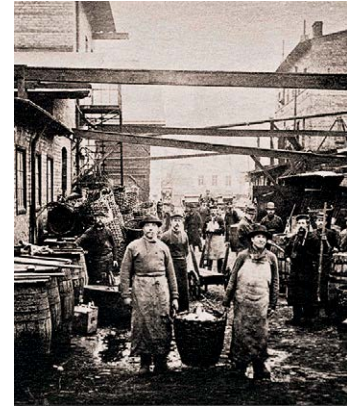
The direct predecessor of the new Degussa, based in Duesseldorf, was Degussa-Huels AG, headquartered in Frankfurt. Degussa-Huels was itself the product of a merger between Huels AG of Marl and the (old) Degussa AG of Frankfurt.

After Degussa AG of Duesseldorf became part of the industrial group emerging from RAG, it was renamed Evonik Industries AG in 2007. The newly established RAG Foundation became its owner.

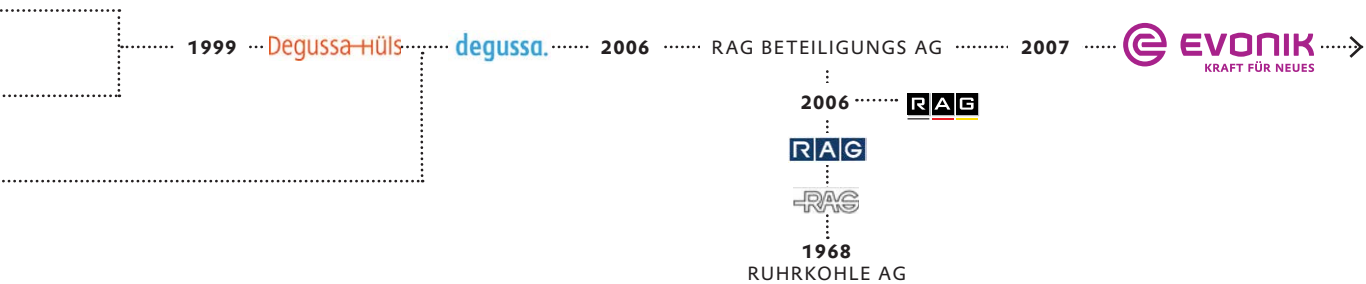
The energy and real-estate businesses were then divested, after which Evonik Industries became the specialty chemicals company it is today with operations in more than 100 countries around the world and listed on the stock exchange since 2013. Dividends paid by Evonik help the RAG Foundation finance liabilities arising from the closing of the hard-coal mines.

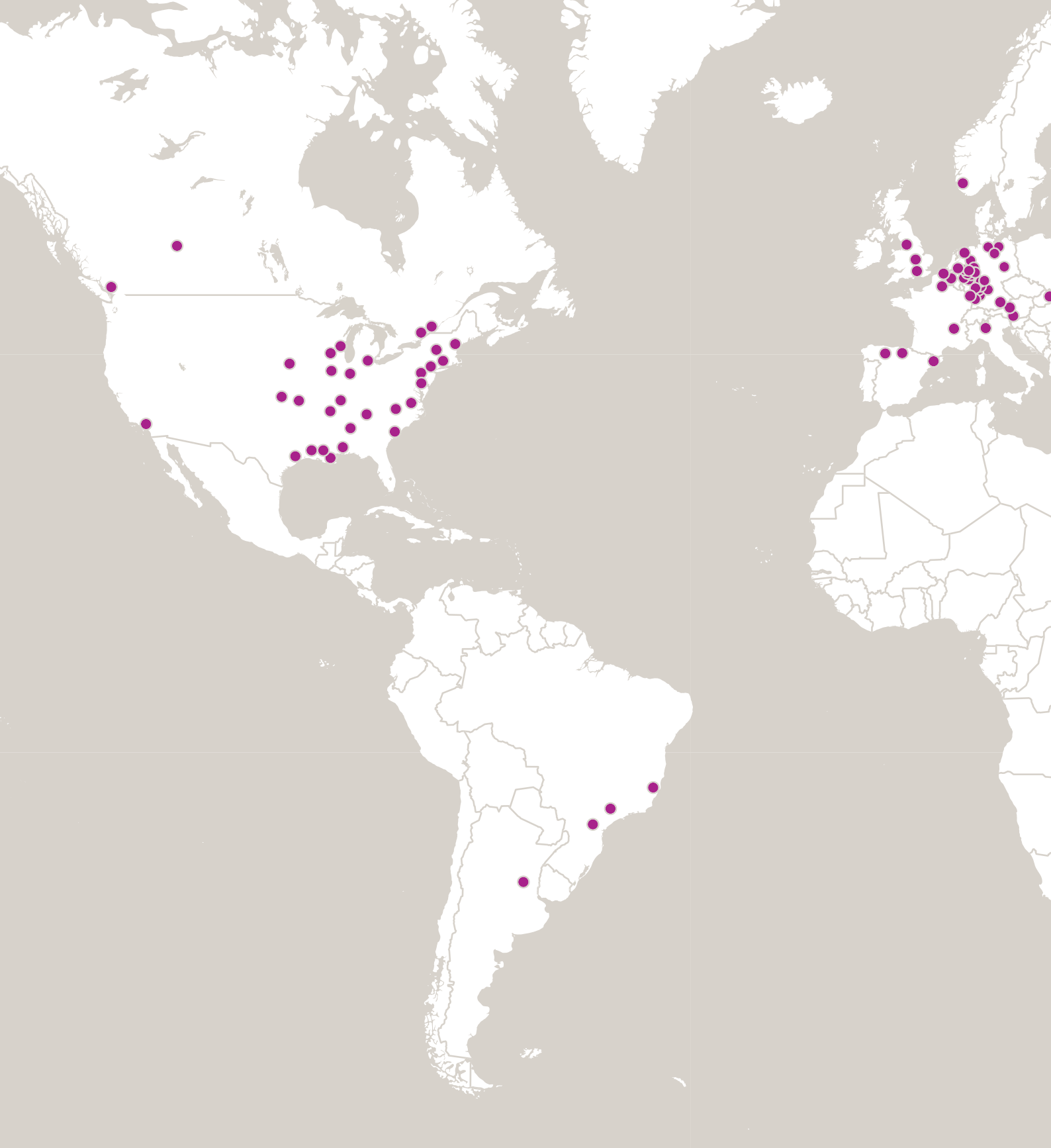


The logo with the new Evonik brand name was unveiled at company headquarters on September 12, 2007.



A small chemical production operation in 1886: the factory yard and workforce of Chemische Fabrik Th. Goldschmidt at its former site along the Landwehrkanal in Berlin.







EVONIK WORLDWIDE

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100 production sites

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