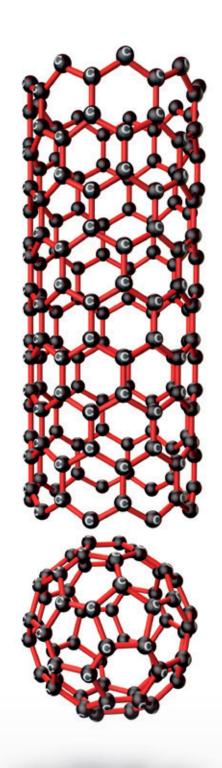
### **QUALITY WORKS.**



QUALITY WORKS. LANXESS



#### **WELCOME TO LANXESS!**

#### Dear Colleagues,

LANXESS quality sets standards! That is why the title page of this brochure features an exclamation mark made of nanotubes: because it is on the chemical level where the qualitative difference between the ordinary and the extraordinary happens. Carbon nanotubes are an excellent example of this: They are made of unique carbon structures that are only a few nanometers thin. Among other things, this allows for extraordinarily high electric and thermal conductivity. Which is why they are used as electrode material in lithium ion batteries, for instance, where they are used to increase capacities and charging cycles.



Over the past several years, we have successfully realigned LANXESS together and established our values-oriented company culture, which is also supported by our **Quality Works** campaign. It is becoming an increasingly self-evident feature of our work and our mindset. Quality is paramount for us in everything we do – for high-quality, sustainable products, for greater quality of everyday life and for the success of our customers. And this is precisely what we call energizing chemistry. In the pages that follow, we would like to give you an understanding of our concept of LANXESS quality.

I wish you interesting and enjoybale reading!

Matthias Zachert

CEO LANXESS AG

### WHAT IS QUALITY?

### **QUALITY ENTHUSES.**



## **QUALITY** IS THE INDIVIDUALLY PERCEPTIBLE SUM OF PREMIUM CHARACTER, WORKMAN-SHIP AND EMOTIONAL DESIRE.

We perceive quality with all our senses. We hear, see, taste, feel and smell it. We desire it and it delights us. It's clear that quality should actually be somewhat of a matter of course nowadays.

#### **Quality from LANXESS.**

Our understanding of quality: We are well aware of the fundamental importance that quality has for the success of our customers, which is why quality is far more than a matter of course for us. Quality is our company's highest maxim. As such, we live LANXESS quality in all dimensions, thereby moving our customers, and in return their customers, to action. That's what we call energizing chemistry: Not only do we provide our customers with premium components and raw materials, thereby giving them the ability to produce perfect products, we also give great importance to the fact that our collaboration with them is always characterized by quality: open, friendly, 100% reliable and always focused on solutions.

Social standards
Financial stability
Top management

SERVICE QUA

RELIABILITY

Availability

PRODUCT QUALITY

**Efficient processes** 

LANXESS Energizing Chemistry SUSTAINABILITY

**Global availability** 

Performance culture

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### **QUALITY ATTRACTS.**



#### QUALITY MEANS THAT THE CUSTOMER, NOT THE MERCHANDISE, RETURNS.

Hermann Tietz (1837–1907), German merchant

#### **Product and process quality**

For LANXESS, product and process quality means manufacturing raw materials, specialty chemicals and additives that our customers can utilize to make products and merchandise of unsurpassable quality. As such, our entire process and production chain is tailored towards delivering to our customers exactly what they have ordered: the right quantity, at the right time, at the right place.

Therefore, we regard ourselves as an important and responsible part of our customers' value-added chain with our products and services.

### **QUALITY RELAXES.**



# COMING TOGETHER IS A BEGINNING, KEEPING TOGETHER IS PROGRESS, WORKING TOGETHER IS SUCCESS. Henry Ford (1863–7)

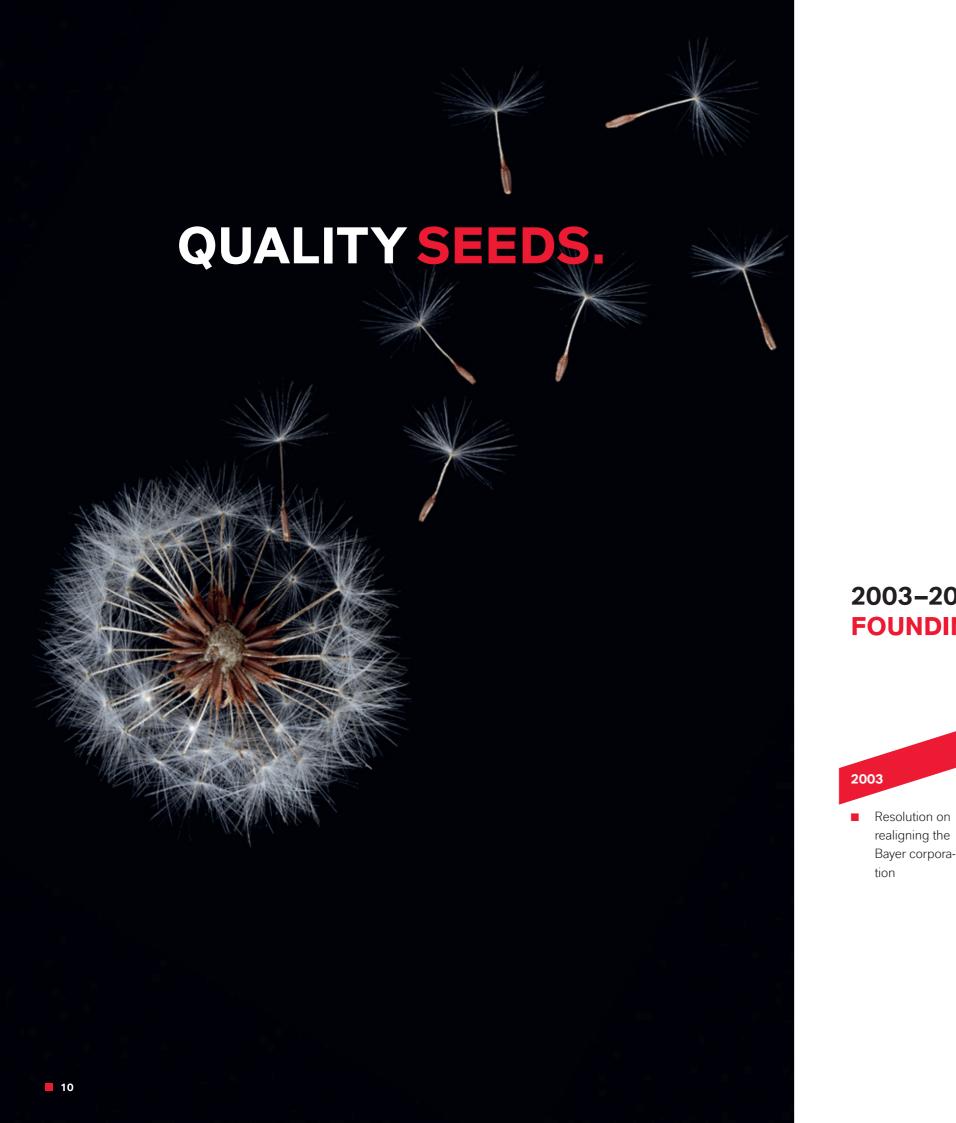
Henry Ford (1863–1947), businessman and inventor

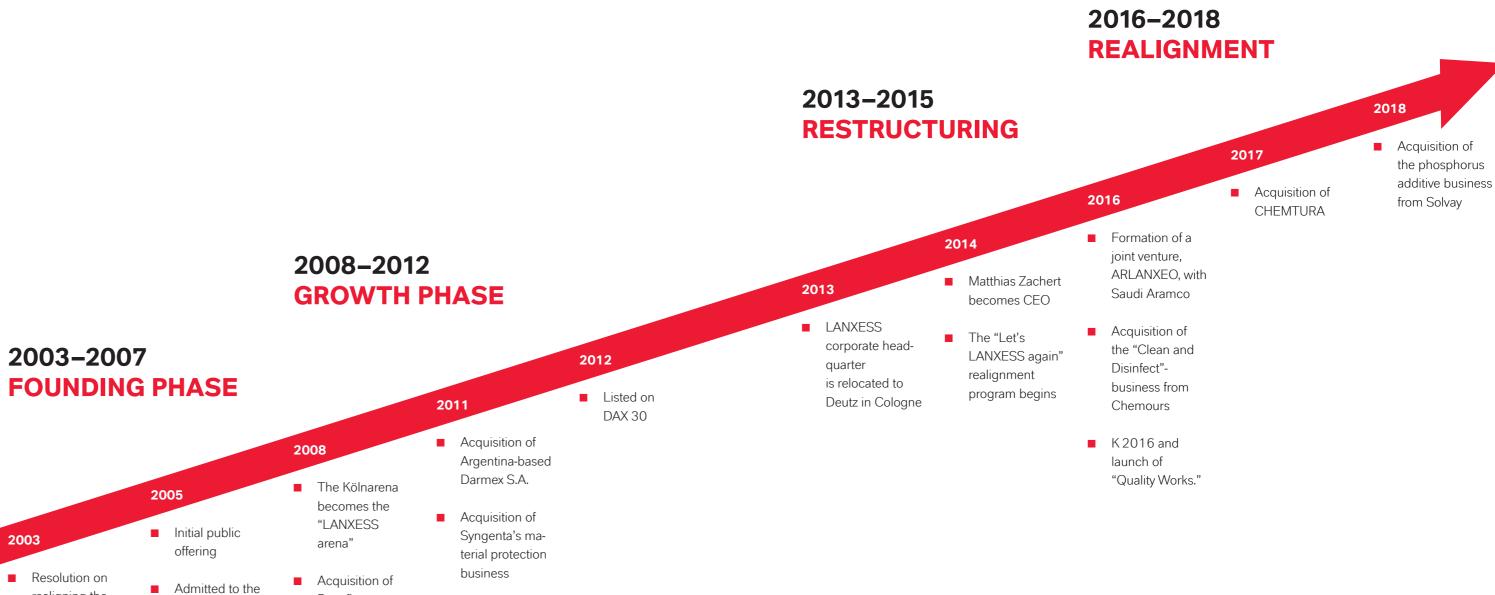
#### Service quality

Quality means much more at LANXESS. Because it is important to us that customers not only have outstanding products and materials. Rather, we want our customers to be able to absolutely rely on us at any time during the collaboration. That's why we live quality in every step of our work: We are fast, straightforward, efficient and we pride ourselves in our human and friendly interaction with each other.

You may not notice it in the finished product, but we always procure only the best raw materials for our customers without inconveniencing them to ensure the highest possible quality. That is why we give our best everyday – not only with our products' high quality but also with our work.

8





Petroflex

Acquisition of the

DSM Elastomer business

MDAX

12 📕

**74 LOCATIONS** 

**25 COUNTRIES** 

**19,200 EMPLOYEES** 

**EUR 9.7 BILLION SALES** 

#### An overview of LANXESS

LANXESS is a leading specialty chemicals company with sales of EUR 9.7 billion in 2017. We currently employ roughly 19,200 employees in 25 countries. Since mid-2017, LANXESS has been present in 74 production sites worldwide thanks to the acquisition of Chemtura. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics.

Through ARLANXEO, a joint venture with Saudi Aramco, LANXESS is also a leading supplier of synthetic rubber.

LANXESS is listed in the leading sustainability indices, the Dow Jones Sustainability Index (DJSI World & Europe) and FTSE4Good.



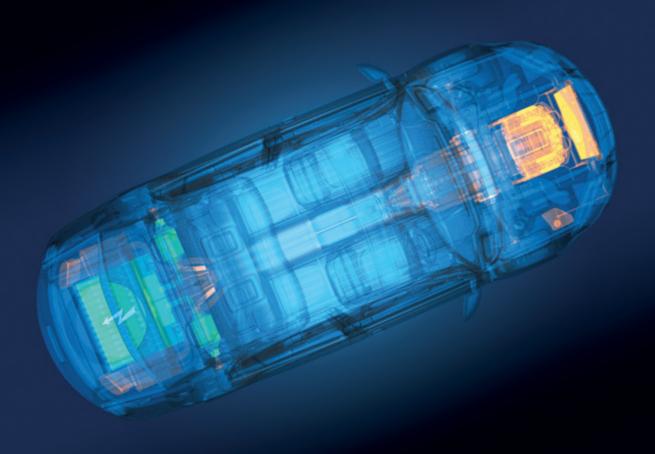
#### **CORPORATE RESPONSIBILITY AND SUS-TAINABLE ACTIONS ARE THE FOUNDATION OF OUR UNDERSTANDING OF QUALITY.**

security, environmental protection, social responsibility and a transparent set of procedures and rules that unite profitability in our activities. This is evident in our guiding management and all employees on an international level. principle, "good for business, good for society". In our We cultivate and encourage a values-oriented culture of view, sustainable thinking and actions are the responsibility success and, in many respects, we are a constructive and of every single employee, and they are a staple of our fair partner in dialogue with interest groups. In the interest corporate culture.

health administration are a top priority for the protection of our employees. We require and encourage the compliance of safety, environmental and social standards at our locations across the world. Furthermore, we support initiatives such as Responsible Care® and the UN Global Compact, and we are certified according to international standards such as ISO 9001 and ISO 14001.

We are committed to acting sustainably and combining With our integrated management system, we have created of our customers, our partners and the corporation, we are committed to making a long-term value contribution and At the same time, occupational safety and safeguarding overcoming corporate challenges through the quality and sustainability of our products.

### QUALITY REDUCES.



#### Less weight for greater reach

The High Performance Materials (HPM) business unit stands for efficiency and reliability. It manufactures high-quality plastic granules for the automotive, electric and electronics industry.

Compared to metals, these plastics reduce the weight in automobiles while simultaneously adding functions. This is because, in a very economical production process, they can be processed into parts that resist high mechanical, chemical and thermal stress. Furthermore, the plastics can be merged with metal structures to form combined systems, making modern motor vehicles safer and more fuel-efficient.

### QUALITY ACCELERATES.



#### Withstanding the harshest conditions

Great forces are exerted on wheels. As a result, the core of the wheel is coated with a polyurethane bandage. Polyurethanes are extremely versatile elastomers that provide strength and durability to high-performance recreational devices such as roller coaster wheels, inline skate wheels or golf balls. Urethane coatings require resistance to wear and abrasion along with chemical and UV resistance. Polyurethane systems from the Urethane Systems (URE) business unit are designed to resist the toughest conditions and provide excellent dynamic characteristics for these applications.

These special elastomers are sold under the brand names Adiprene® and Vibrathane® (urethane prepolymers) and Ultralast® (Thermoplastic urethane).

Hot-cast polyurethanes can be formulated in such a manner that they consume little energy during deformation and therefore only heat up slightly (flat hysteresis). This prevents tires from significantly overheating. Tire material that produces less heat can better withstand greater loads and higher speeds.

Another advantage of hot-cast polyurethanes is that they can also be used to make harder elastomers. This means that they deform less than other elastomers under the same load.

### **QUALITY REFRESHES.**



#### **Increased durability**

The Advanced Industrial Intermediates (All) business unit offers a diversified portfolio of chemical intermediate products for additional processing and refinement processes. Manufacturing these intermediate products, called industrial chemicals, entails complex chemical production processes that require broad knowledge and ultra-modern processes.

Intermediate products from the All business unit are used by numerous industries for manufacturing many different chemical products, such as agrochemicals, medications, dyes, paints, rubber products and cosmetic products. These include, e.g. Menthol – it is a component of cosmetic products such as sports balms for cooling painful injuries and a component of sweets, such as candy or chewing gum.

### **QUALITY GROWS.**



#### **Customized solutions**

Whether it's pesticides, medication or cosmetics - many products from our everyday life owe their effectiveness to the fine chemical substances that the Saltigo business unit develops and manufactures. Saltigo is a partner for "custom manufacturing" and "custom synthesis" - the exclusive synthesis of chemical agents and intermediate products. As a "full-service provider", the Saltigo (SGO) business unit covers the entire value-added chain in this field. Together with its customers, LANXESS' subsidiary develops customized products. Fully in line with "customized competence", Saltigo brings its expertise across the entire value-added chain according to the individual needs of the customer in question - from synthesis planning to process development and pilot testing to campaign planning, standard production and supply-chain optimization. Furthermore, Saltigo can also assist its customers in registering new substances. The substances and intermediate products manufactured by Saltigo are used in pesticides, herbicides, insecticides and fungicides. In the pharmaceutical sector, they are the basis for important medicinal products such as antibiotics or cancer medication. Furthermore, Saltigo also sells an effective substance under the Saltidin® brand that is used in numerous insect repellents. In addition, Saltigo produces additives for polymers and electronic chemicals, fuel additives and substances for cosmetics along with a series of multi-customer products.



### **QUALITY PROTECTS.**



#### Powerful solutions against microorganisms

The Material Protection Products (MPP) business unit offers a wide array of active ingredients, preservatives and disinfectants. Quality products are supplemented by objective and expert technical consulting, registration support and project-related research and development.

The main applications for MPP products are in wood protection, paint and coatings, disinfectants (especially in animal health), water treatment, the construction industry and beverage industry. High-quality products combined with outstanding technical service and high regulatory expertise – that's MPP.

### QUALITY COLORS.



#### **Unique colors**

Inorganic pigments from the Inorganic Pigments (IPG) business unit have been setting standards across the world for decades. They stand out due to their premium quality and very high chemical and physical resistance. Nowadays, our iron oxide and chromium oxide pigments under the Bayferrox® and Colortherm® brands are used for a multitude of applications: They are used all over the world for colors in walls and house facades. Here is an example of how LANXESS gives France's pride its famous color: The Eiffel Tower is repainted every seven years - with a special paint that contains quality Bayferrox®-brand pigments. Pigments are also used to color construction materials such as concrete cobblestones and roof tiles and in modern exposed concrete architecture. They give artificial turf in sports facilities their lush green or make

WPC panels for terraces shine in various colors. Inorganic pigments by LANXESS are available in red, yellow, green, brown and black with over 100 different color nuances. IPG also develops Bayoxide® pigments for customized special applications. The range of pigment assortments for airbags and catalysts even includes the desulphurization of biogas.

### **QUALITY LIGHTENS.**



#### **Extra-light leather**

Leather is a premium, unique and durable material that is simultaneously smooth and firm, tough and durable. As such, leather is ideal for the interior of automobiles.

The Leather Chemicals (LEA) business unit covers the need for chemicals along the entire value-added chain with its high-quality products for the leather industry. From tanning agents to preservatives to high-quality finishing products for all leather types, LEA offers diverse system solutions for leather processing.

Globally, the business unit is the only provider that produces both organic leather chemicals and chrome tanning materials. Chrome ore is the most important raw material for chrome tanning materials. Apart from being used in the leather industry, it is also used in the stainless-steel industry and in producing chrome chemicals for various industries. Through the "Sustainable Leather Management" program, LEA furthermore offers a technology platform that is specially tailored to environmentally-friendly production processes. This portfolio of leather chemicals is already redefining the term sustainability in the leather industry.

### **QUALITY PURIFIES.**



#### Clean water

Whether it's producing drinking water, treating and recycling industrial process and wastewater or for water softening in the household, the Liquid Purification Technologies (LPT) business unit is one of the world's most important providers of water and fluid treatment products. Its portfolio includes Lewabrane® membrane elements for reverse osmosis, Lewatit® ion-exchange resins and Bayoxide® iron-oxide adsorbers. These high-performance products are used in numerous industries such as energy production, the food industry, chemical and petrochemical

industry, pharmaceutical industry, electronics industry, metalworking industry and in mining.

LewaPlus® design software can be used to create water treatment plants with Lewatit® and Lewabrane® in a customer-focused manner. As such, LANXESS makes a valuable contribution to the recycling economy.

### **QUALITY TRUSTS.**

### **QUALITY PERFORMS.**





#### Reliable products and services

As one of the leading global suppliers of additives, the LANXESS Additives (ADD) business unit comprises two business lines, Lubricant Additives and Polymer Additives and operates at more than 20 sites in 12 countries worldwide. We offer a broad portfolio of high-quality flame retardants, plasticizers, hydrolysis stabilizers, plastic additives, phosphorus

specialties & intermediates, bromine performance products, lubricant additives, finished fluids and greases as well as base fluids.

The Additives business unit features an extensive international sales force ensuring direct and personal contact to our customers. With laboratories and technical competence centers in all regions of the globe, we provide excellent technical advice and reliable quality. Our customers benefit from our strength, our technical expertise and a wide portfolio of innovative, reliable products and services.

#### High-performance pigments and rubber additives

The Rhein Chemie (RCH) business unit sells customized substance compounds, specialty chemicals and process aids for the rubber, plastic and dye industries. As a partner of the rubber industry, RCH offers premium solutions in rubber processing for tires and technical rubber goods. The expansive portfolio includes pre-dispersed chemicals, processing promoters, vulcanizing agents and filler activators, anti-sun check waxes, release agents, tire marking paints and high-performance curing bladders (vulcanization bellows).

Additionally, the business unit produces dyes, pigments and pigment preparations, which are used in the plastic, dye and paint industries, as well as in ink, LCD screens and many more products.

■ 24 Specialty Additives | Business Unit: Additives | Business Unit: Additives | Business Unit: Rhein Chemie 25 ■



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#### Forward-looking statements:

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