Arkema’s solutions portfolio for the coatings industry: one of the most extensive in the market

Arkema, a world leader in materials for coatings and paints, has a multi-technology and multi-product offering, unique in the coatings and paints industrial market. The Group is showcasing its complete offering at the European Coatings Show in Nuremberg from April 21 to 23, 2015 (Hall 4A - Stand 328).

With its extensive materials and technologies portfolio, Arkema covers the majority of coatings applications: architectural and decorative paints, coatings for wood, plastics and metal, and inks. The Group offers a vast array of resins and additives with highly diverse chemistries and technologies. This feature enables it to adapt to the specific requirements of customers, whatever their location, and to cover every single coating market:

- construction,
- transport,
- maritime,
- electronics,
- printing and packaging inks,
- textiles, non-wovens and leather.

Arkema’s Coatings business ranks the Group in 3rd place in the world among suppliers of materials and technologies for paint and coating formulators.

Its portfolio of resins, solvents and additives is one of the most comprehensive in the market, and includes:

- Acrylic emulsions for water-based paints (ENCOR®, Neocar®, Synqua® Synqua®, SNAP®).
- Polyester and alkyd resins for solvent-based paints (Chempol®, Crayamid®, Synocure®, Synolac®, Realkyd®, ...).
- PVDF fluorinated polymers for long-lasting exterior coatings (Kynar 500®).
- Rheology additives (dispersants, thickeners) from Coatex for water-based coatings (Ecodis™, Coadis™, Coapur™, Rheotech™, Viscoatex™, ...).
- Polyamide fine powder additives to improve texture and surface durability (Orgasol®, Rilsan® Fine Powders).
- Acrylate and methacrylate specialty resins for UV-curing from Sartomer.
- Oxygenated solvents (synthesis solvents, coupling agents and coalescence agents).
- And, finally, surfactants, polyols, and molecular sieves (Dianol®, Adiansol®, Ensoline®, Surfaline®), and wetting agents and dispersants (Ensoline® and Surfaline®) from CECA, yielding superior durability in industrial paints.

The ECS trade fair is the opportunity for Arkema to unveil a number of innovations and its recent news and developments.

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A global chemical company and France’s leading chemicals producer, Arkema is building the future of the chemical industry every day. Deploying a responsible, innovation-based approach, we produce state-of-the-art specialty chemicals that provide customers with practical solutions to such challenges as climate change, access to drinking water, the future of energy, fossil fuel preservation and the need for lighter materials. With operations in close to 50 countries, some 19,000 employees and research centers in North America, France and Asia, Arkema generates pro forma annual revenue of some €7.5 billion, and holds leadership positions in all its markets with a portfolio of internationally recognized brands.
Innovation

Orgasol® 1002 ES5 NAT1, the only polyamide 6 powder designed for coil coating combining performance and competitiveness

Arkema launches its latest innovation, Orgasol® 1002 ES5 NAT1, a spheroidal polyamide powder with a melting point in excess of 210 °C, combining a 50 µm average diameter with a narrow particle size distribution.

These unique properties help achieve a regular and uniform coating, even when the particles are subject to very high temperatures.

Orgasol® 1002 ES5 NAT1, designed for use as a texturing agent for polyester and polyurethane coatings, also enhances abrasion and scratch resistance.

The new Orgasol® 1002 ES5 NAT1 grade, while maintaining high quality standards, represents an innovative and cost-effective solution for players of the coil coating sector.

Arkema offers Orgasol®, high-performance polyamide powders for use as surface additives in industrial coatings. Orgasol® ultra-fine polyamide powders are polymers and copolymers of lauryl lactame and/or caprolactame obtained by direct polymerization. Due to this unique process, Orgasol® powders are available as micro-porous spherical beads with a very narrow particle size distribution. In the graphic art and coating industries, Orgasol® ultra-fine polyamide powders offer unique properties such as abrasion and scratch resistances, surface texturing effect, gloss control and anti-blocking. Accordingly, Orgasol® powders help achieve the required performances in a wide range of coating types (solvent-based, water-based, UV/EB and powder) and coating processes (roller or spray). Coil coating, can coating, industrial coating (metal, wood, plastics, rubber, glass...), paper coating, ink and over-print varnish are typical applications.

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Arkema brings new resins reactor online in Brazil

The Coating Resins business of Arkema has expanded acrylic resin manufacturing capacity in Araçariguama, Brazil by 60%. The new reactor will enable manufacturing of Arkema’s product chemistries previously unavailable in the region.

With the start-up of the new reactor, Arkema has improved virtually every aspect of the company’s latex production in Brazil, including manufacturing, logistics and shipping, storage, filtration, and the capabilities of the reactor itself.

“These improvements will enable us to begin migrating production capabilities and product lines currently available in other parts of the world to the facility in Brazil,” Eric Schmitt, President, Arkema Quimica Ltda. Brazil, explained. “We can now provide customers with local manufacturing of innovative, market-leading products, produced in a modern, automated facility with a focus on consistent, repeatable quality, and environmental responsibility.”

Products manufactured at the plant will now include a much wider range of chemistries, including 100% acrylic, styrene acrylic, vinyl acrylic, vinyl VeoVa™ and polyvinyl acetate (PVA). These products are used across many traditional and emerging applications in industries such as architectural coatings, industrial coatings, pressure sensitive adhesives and construction adhesives, textiles, sealants and waterproofing membranes.

As production ramps up, Arkema will begin to introduce new products based on demand and market potential. The first products added to the production capabilities of the new facility include:

- **ENCOR® 265 BR**, a high scrubbing styrene acrylic resin for use in architectural coatings.
- **ENCOR® DT 211 BR**, a 100% acrylic ideally suited for fast-dry traffic paints.
- **ENCOR® 161 BR** styrene acrylic latex for use in mortars and grouts, tile adhesives and waterproofing membranes, as well as cement-based skim coats, gap fillers, and in decorative concrete applications.
- **ENCOR® 413 BR**, an acrylic emulsion polymer specifically developed for use in the polymer modification of Portland cement and other hydraulic cement compositions.
- **ENCOR® 9801 BR** acrylic pressure sensitive adhesive for packaging tape applications.
- **ENCOR® 9466 BR**, a high solids acrylic pressure sensitive adhesive for label applications.

“Arkema has been investing consistently to expand our global presence in resins” said Carlos Lion, Market Manager for Arkema Coating Resins in South America. “Local production in Brazil will allow us to better serve our current customers while, at the same time, offering formulators in various..."
market areas, such as coatings, construction and adhesives, more competitive access to the raw materials they need."

The start-up of this new capacity underscores Arkema’s commitment to growing its franchise in the global coatings industry, as well as in local markets served.

For more information about Arkema Coating Resins, visit www.arkemacoatingresins.com.

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Visit www.arkemacoatingresins.com
ENCOR® is a registered trademark of Arkema Inc.
VeoVa™ is a trademark of Hexion Inc.
Sartomer showcases its most recent developments to enhance the performance of UV-LED curable systems

Sartomer, a subsidiary of the Arkema Group, is the premier global supplier of acrylate and methacrylate monomers, oligomers and unique specialty chemicals designed for high performance UV (ultra violet) and EB (electron beam) curable systems. The company innovates with new high functional resins that help maximize the performance of UV-LED cured inks and coatings in terms of speed and quality of curing.

For several decades, UV curing systems have typically used at least one medium pressure mercury bulb giving broad spectral emissions. These systems were generally designed to obtain the fastest cure speed possible, with productivity gains as the ultimate goal. Today, UV curing is a major industrial technology, offering powerful solutions for printing inks and coatings.

As this technology progresses, curing systems based on LEDs are becoming increasingly interesting for end-users. They can offer several cost benefits over traditional UV mercury lamps. As a consequence, LED curing builds on the groundwork established by the conventional UV curing systems, and opens new possibilities for high performance radiation curing applications.

Any new technology will always entail new technical requirements to maximize performance. A particular interest with LEDs is improvement in surface cure speed. Once again, Sartomer has lived up to this challenge by developing a new generation of high functional resins to boost reactivity, reduce oxygen inhibition on surface, maximize acrylate conversion, and enhance the performance of UV-LED cured inks and coatings. Sartomer will unveil these innovative resins at the upcoming European Coatings Show, April 21 to 23, 2015 in Nuremberg, Germany (ARKEMA booth 328, Hall 4A).

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Arkema celebrates 50 years of Kynar 500® PVDF resin

Kynar 500® PVDF resin, a pioneering fluoropolymer chemistry that provides coatings with remarkable durability, weather resistance and color retention properties, marks its 50th anniversary as demand continues to be strong in architectural applications, where exceptional performance is required.

Available exclusively from Arkema through a strict licensing program, Kynar 500® PVDF resin is used in long-life coatings that protect some of the most iconic buildings around the world—including the Louvre Pyramid in Paris, Wimbledon Tennis Court Number 1 in London, the Oriental Pearl Tower in Shanghai, and the Renaissance Center in Detroit.

"Thanks to the support of our licensee partners, such as PPG Industries, Kynar 500® PVDF resin-based coatings will keep these beautiful architectural treasures vibrant and appealing for a long time," said Erwan Pezron, Global Managing Director of Arkema's Fluoropolymers business unit.

Kynar 500® PVDF resin-based coatings were the original high-performance durable finishes for protecting aluminum, galvanized steel, and aluminized steel building components against blistering heat, humidity, pollution, acid rain, corrosive salt, and abrasion for decades of useful life. Introduced in 1965, the Kynar 500® PVDF resin breakthrough technology is known within the architectural community as one of the world’s most weatherable resins for creating a coating system with an extraordinary capability to retain color and gloss. Today, Kynar 500® PVDF resin-based coatings provide billions of square feet of protection against weathering, aging and pollution on commercial, industrial, institutional and residential buildings around the globe.

Arkema’s R&D has a strong tradition of developing next-generation coating solutions based on Kynar 500® PVDF resin technology. Recent product introductions include Kynar 500® FSF® fluorosurfactant-free resin developed to eliminate perfluorinated surfactants such as perfluoroctanoic acid (PFOA) from the manufacturing process, and Kynar Aquatec® latex for producing water-based coatings that meet the most stringent volatile organic compound requirements. As the industry’s leading fluoropolymer supplier, we are celebrating this legacy of leadership and renewing our commitment to providing customers with innovative Kynar 500® PVDF resin-based coatings solutions for the next 50 years.

Help us celebrate 50 years, all year long. Visit Kynar500.com, follow the hashtag #kynar500, and find us on social media to get the latest news and join the conversation.

Since first introduced in 1965 for architectural metal coatings requiring exceptional durability, many new grades of Kynar® resins have been developed for a variety of markets and applications. With their outstanding resistance to chemicals, UV radiation, and high temperatures, Kynar® fluoropolymer products are widely used in the chemical processing industry, offshore oil and gas production, water treatment, and in newer applications, such as Li-ion batteries and photovoltaic solar panels. Learn more about the comprehensive range of Kynar® grades and their many applications on www.kynar.com. Kynar 500® FSF®, Kynar Aquatec® and Kynar® are registered trademarks of Arkema Inc.

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CECA presents its specialty surfactants and polyols based on alkoxylates and fatty amines to improve durability of coatings

On the occasion of ECS 2015, CECA will be presenting its complete range of surfactants and polyols sold under the brand names Dianol®, Adiansol®, Ensoline® and Surfaline®. The Dianol® and Adiansol® products are used to improve the adhesion properties and hydrolysis resistance of industrial coatings and automotive resins. The Ensoline® and Surfaline® products are wetting and dispersing agents for better stabilization of paints. CECA provides a high level of services for its customers and develops innovative solutions to meet the new regulatory coating requirements.

The leading European producer of diatomaceous earth and perlite filter aid, CECA supplies its minerals under the brand names Clarcel® and Randafil™ in a range of functional additives for paints as well as decorative and industrial coatings. The physical structure and morphology of diatoms and perlite bring a matting effect and give the film roughness, enabling better inter-layer adhesion. Through their hardness and chemical inertness, these minerals also increase the functional abrasion resistance of coatings, thus extending their lifetime. Furthermore, the porosity of diatomite enables the control of vapour permeability while providing weathertight qualities.

With 40 years’ experience in molecular sieves, CECA also offers a wide range of adsorbents to address various problems related to the presence of water in mono- and bi-component polyurethane systems. Sold under the brand name Siliporite®, these molecular sieves are excellent desiccants and humidity traps, used to prevent surface defects and extend the pot life of polyurethane systems.

More information on: cecachemicals.com

Ceca

Ceca, a subsidiary of the Arkema Group, is a world player in Specialty Chemicals. Ceca constantly strives to improve its customers’ performance by creating and developing adsorbents, chemical intermediates, and additives. Ceca operates an extensive network of industrial facilities, together with two research centres (GRL and CRRA) dedicated to customer innovation.

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