Welcome to the world of colors! From 19-21 March, the international coatings industry will be presenting its vibrant range of new products and latest developments at the European Coatings Show (ECS) in Nuremberg. With over 1,000 exhibitors, visitors can look forward to numerous exciting innovations in the world of paints, coatings, sealants, construction chemicals and adhesives. At the last ECS in 2017, almost 30,200 visitors from over 107 countries came to Germany – a remarkable number that will certainly be surpassed this year. The NRC Group has been a permanent member of the ECS exhibitor group for many years and will once again present its innovations together with its co-exhibitors this year. The globally active distribution company can be found in Hall 4, Stand 4-640.

“We are very happy to welcome co-exhibitors to our stand again this year. Arakawa, Aramco Chemicals, Elachem, Honeywell, KaMin, NYACOL and SNCZ - we are connected to all of them through successful partnerships,” explains Heidi Hinrichs, Sales Director Coatings & Construction Germany at Nordmann, Rassmann GmbH. “Together we develop efficient and tailor-made solutions for our customers that are ready to use”.

The ECS is a reliable indicator for future trends in the different industrial sectors. In personal discussions, visitors can inform themselves about current topics in the coatings market and, above all, get advice about formulation solutions. Numerous international participants can also be found at ECS, as Hinrichs explains: “For us as a global distributor, it is a matter of course to have colleagues from our subsidiaries join us at our stand. With our combined know-how, we can respond perfectly to the individual needs of different countries and markets.”

**Successful business in 2018**

The NRC Group was able to increase sales thanks to ongoing positive developments in the construction industry in 2018, despite the limited availability of various raw materials. Thorsten Prott, Business Manager for Composites & Construction, has a positive outlook for 2019: “Low-emission building materials are becoming more and more popular in the construction industry. The NRC Group has strong partners that are very well positioned for this and have innovative new solutions to offer. With our broad portfolio of additives, we look forward to a successful 2019 and contributing to a strong construction industry.”

On the other hand, while the coatings and inks industry in Germany has hardly been able to generate any growth in recent years, the NRC Group’s sales in this segment have grown rapidly. Providing competent consulting services has played an integral role in this, especially in the case of highly complex raw materials. “We are pleased that the continuous expansion of our raw materials portfolio with high-performance products from NRC Group partners is helping customers perfect their formulations,” says Peter Kuchenbrod, Business Manager Coatings & Inks. “Our recipe for success involves good communication with our partners. This applies both to our customers and our suppliers. Together we stand for quality, reliability and consulting competence.”

Henning Schild, Business Manager Adhesives & Sealants, explains that in the adhesives and sealants segment, market supply with various product groups will continue to play a role in 2019. “The rapidly growing demand from other industries is a challenge. Through excellent cooperation with our suppliers, combined with commitment and creativity, we can always offer our customers sound alternatives. We are also focusing on new requirements that have resulted from technical developments, such as plastic surfaces that are difficult to wet with adhesives, increasing restrictions on application safety in food packaging, for example, and the trend towards bio-based, sustainable materials. Increased attention, the right selection of partners and the ability to assess scenarios and develop new perspectives are strengths that we at The NRC Group are using to meet these challenges. We offer a wide range of exciting options for adhesives and sealants, and that allows us to look eagerly into the future,” says Schild.

On the following pages, The NRC Group shares a variety of suggestions for future developments as well as reports on new and established partnerships. We hope you enjoy reading.

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**Celebrate with us!**

We have rebranded - time to celebrate!
Be part of our ECS kick-off party in Nuremberg to discover the whole new Nordmann.

March 19, 2019
Starting 5 pm
Hall 4, Stand 4-640
In the 1999 opened manufacturing site in Böhlen in Germany, ARKON™ has been used successfully for many years in hot melt and hot melt pressure-sensitive adhesives. Solvent-free systems represent a significant segment in the adhesive market. Waterborne adhesives, HMA and HMPSA are commonly considered as substitutes for solvent-based adhesives. ARKON™'s hydrocarbon resin is often the talk of choice, due to its excellent thermal stability and high degree of compatibility.

Inorganic fluorescent particles can be excited by IR light and can be used for many years in conventional printing inks and coatings or paints. Certain organic pigments perform well in luminescent processes, and certain fluorescent pigments and dyes have specially narrow, bright-line emission that can be used for effective machine detection. Such light emitters can be used with proprietary detectors to discriminate them from conventional UV materials for enhanced security.

Honeywell’s pigments lead the way for many applications

Honeywell’s pigments lead the way for many applications. Honeywell is known for its Lumilux® brand of phosphorescent pigments, but also carries the world’s broadest range of fluorescent and phosphorescent pigments. These materials cover a significant range of excitation wavelengths, from UV to infrared radiation in various shades of blue, green, yellow, orange and red. The variety of colors available makes it easy to meet different application requirements, and partnering with The NRC Group guarantees the reliability of products and supply chains.

Materials for safety and security applications

Visual light is one of the ways to emit light — for identifying emergency exits and also as a distinctive, intriguing and useful product feature. Materials that glow all light in the dark without the need for electrical power make unique applications and effects possible, and Honeywell’s pigments do just that. Honeywell has made unique applications and effects possible, and Honeywell’s pigments can be used in a wide range of products to make counterfeits practically impossible.

Polyester polyols

Elachem: polyester polyols become tailor-made

Elachem S.p.A. was founded in the Italian town of Vigevano in 2001 and specializes in the production of polyester resins for the footwear industry. With an increase in production volume for polyester resins and the aim of becoming even more competitive in the market, Elachem decided to integrate backwards and now has a plant for the production of polyester resin. These products are designed according to the needs of specific industry sectors and are produced with the quality guarantee of Elachem’s long-lasting experience gives companies the support they need to make counterfeits practically impossible.

CUSTOMERS are welcome to see the impact Elachem’s cutting-edge technology can have on product performance with their own eyes. To schedule a visit on-site, please contact the team at Nordmann, Rassmann GmbH.
**Innovative CO₂-based polyols for CASE**

Converge®

Since 2013, NRC has been active in the sales and marketing of Aramac’s innovative CONVERGE® polyols to the German CASE market (coatings, adhesives, sealants, elastomers).

Aramac’s CO₂-based Converge® polyols are high-performance oxides for polyurethane CASE applications that meet the growing global demand for sustainable chemical products. The polyols, which incorporate up to 40% CO₂ by weight, are compatible with conventional polyether and polyester polyols, allowing for a wide range of formulation flexibility. In polyurethane cast elastomers, Converge® polyols have demonstrated improved tensile strength over competitive materials as well as excellent hydrolytic stability in general CASE applications.

**Using KaMin® 2000C and oil absorption to optimize paint performance**

KaMin® 70C, KaMin® 300C, KaMin® 2000C

**KaMin® 2000C**

Calcined kaolin is commonly used as an extender in many architectural paint formulations. A longstanding partner of The NRC Group’s, KaMin® offers the entire range of calcined kaolin products on the European paint and coatings market, while allowing formulators to achieve the best balance of properties for their particular needs.

- **KaMin® 70C** is a standard particle size, moderate oil absorption calcined kaolin. It provides an acceptable balance of optical and durability properties at an economical price point.
- **KaMin® 300C** is an ultrafine particle size calcined kaolin with high oil absorption. It provides the most opacity in formulations where PVC is significantly higher than the critical PVC.
- **KaMin® 2000C** is an ultrafine calcined kaolin with an oil absorption in between that of 70C and 300C. It provides excellent color and improved durability properties where directly compared with many other ultrafine calcined kaolin products available.

While KaMin offers the entire range of calcined kaolin products on the European paint and coatings market, many customers have success using KaMin® 2000C. When replacing a high oil absorption, ultrafine calcined kaolin with KaMin® 2000C, formulators may be able to reduce binder solids as much as 15%, achieving the same final paint performance at a significantly lower overall raw material cost.

**Eco-friendly anti-corrosive pigments**

NRC Group & SNCZ – together at the 2019 ECS

The NRC Group and Société Nouvelle des Céramiques Zirconiums (SNCZ) have been partners for almost 38 years. As the world’s largest manufacturer of anti-corrosion pigments, the French company SNCZ also produces a range of innovative and eco-friendly products. The NRC Group is responsible for distributing these in several European countries.

<table>
<thead>
<tr>
<th>Product</th>
<th>Specific gravity</th>
<th>% Pb</th>
<th>2 Average value</th>
<th>pH</th>
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<td>2.0</td>
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<td>4</td>
<td>cable</td>
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</tbody>
</table>
New binder from Trinseo exceeds industry requirements for D2 tile adhesives

LIGOS™ S3023 is a high-performance, water-based binder suitable for internal application on walls in showers, bathrooms and other wet areas. This low-VOC binder does not contain APEO surfactants and is formaldehyde-free. LIGOS™ S3023 is designed to be industry-compliant and compatible with waterproof membranes. Looking for the right solution? The Trinseo team and NRC Group representatives will be pleased to help you find it. Trinseo will be at the ECS in Hall 4 at Stand 4-313.

The colors and effects of tomorrow

Each year, the year’s color trends are worked out by the Eckart Industrial Coatings team. One of the team’s main tasks is to develop color shades according to precise customer specifications, which can then be used in e.g. plastic coatings for consumer electronics or household applications. Eckart’s involvement in the International Color Marketing Group is key, as it is where designers and color experts from a wide variety of industries meet up to participate in joint workshops and trend analyses. In addition, Eckart’s color shade selections are informed by both the fashion and automotive industries as well as the company’s own sales trends.

ECKART’s color specialists then define five color series, each with six tints, and develop corresponding pigment formulations. Especially where coatings and plastics are concerned, effect pigments based on metal or tin glass faxes are used to create different nuances. These can be used to create either warm or cool colors with a very special shine, glitter or sparkle. Eckart takes care when adapting formulations for different coating systems and formulas for coloring plastics.

This special service is well-received by customers. Some implement Eckart’s suggestions directly for their paints and plastics, while others are inspired to formulate their own color creations. In each case, customers get a clear impression of the variety of effect pigments available and how they can be used to enhance new products.

As for the question of what color trends we can expect to see in the coming years, the trend scouts at Eckart are working diligently to complete the company’s new collection. Its “Trend Colors for Coatings 2008” will be proudly presented at this year’s European Coatings Show (Stand 4A-314 A1)

In brief, the main differences between Mighty® LF-1032 and Mighty® LF-203, 203PS and 213PS are:

- Moderate initial dispersibility
- Very good workability, long storage
- Reactivity with all Mighty® grades is possible to give better initial dispersibility

The fine particle size (3 mm maximum) of Mighty® LF-1032 also contributes to its excellent dispersing properties and solids. The products are particularly suitable for use in applications where the product is to be used as a prepolymers, prepolymers or resins for shoe sole production.
Asphalt additives

Bitumen additives for road construction and structural sealing

KAO Corporation is a Japanese company that was founded in 1887 and now has more than 33,000 employees around the world. The NRC Group markets KAO Corporation’s surfactants and other chemical products in different European countries.

Table 1: Butyl vs. octyl organotins by ligand type

<table>
<thead>
<tr>
<th>Stannous Product</th>
<th>Butyl Organotin</th>
<th>Octyl Organotin</th>
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<tbody>
<tr>
<td>REAXIS® 160</td>
<td>Octyl polyamine</td>
<td>Paste</td>
</tr>
<tr>
<td>REAXIS® 131</td>
<td>Octyl polyamine</td>
<td>Paste, very rapid setting, for high-viscosity emulsions</td>
</tr>
<tr>
<td>REAXIS® 115/117</td>
<td>Octyl polyamine, liquid, very rapid setting</td>
<td>Liquid, cold-setting, for high-viscosity emulsions</td>
</tr>
<tr>
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<td>Octyl polyamine, paste</td>
<td>Shiny and microsalting, cold-setting, cold-setting, cold-setting</td>
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<tr>
<td>REAXIS® 218</td>
<td>Octyl polyamine, liquid</td>
<td>Shiny and microsalting, cold-setting, cold-setting, cold-setting</td>
</tr>
<tr>
<td>REAXIS® NM4</td>
<td>Octyl polyamine, liquid, cold-setting</td>
<td>Shiny and microsalting, cold-setting, cold-setting, cold-setting</td>
</tr>
<tr>
<td>REAXIS® A-105</td>
<td>Octyl, liquid</td>
<td>Cold-setting, cold-setting, cold-setting, cold-setting</td>
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<tr>
<td>REAXIS® A-50</td>
<td>Octyl, liquid</td>
<td>Cold-setting, cold-setting, cold-setting, cold-setting</td>
</tr>
</tbody>
</table>

Table 2: Common stannous products used as catalysts

<table>
<thead>
<tr>
<th>Name</th>
<th>Properties</th>
<th>Application</th>
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</thead>
<tbody>
<tr>
<td>GRIPPER® L</td>
<td>Liquid, extremely high heat stability</td>
<td>Antistripping agent for HMA</td>
</tr>
<tr>
<td>GRIPPER® 455</td>
<td>Gallium extremely high heat stability</td>
<td>Antistripping agent for HMA</td>
</tr>
<tr>
<td>GRIPPER® 80</td>
<td>Liquid, extremely high heat stability, low viscosity</td>
<td>Antistripping agent for HMA</td>
</tr>
<tr>
<td>ASFIET® M1</td>
<td>Liquid for bitumen emulsion</td>
<td>Antistripping agent for bitumen emulsion</td>
</tr>
</tbody>
</table>

Table 3: Antistripping agents

<table>
<thead>
<tr>
<th>Name</th>
<th>Properties</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>DABIS® SAP 400</td>
<td>Non-volatile, biodegradable and non-toxic liquid</td>
<td>Rejuvenating fluid for reclaimed asphalt</td>
</tr>
<tr>
<td>DABIS® 15</td>
<td>Alkyl polyamine, derivation liquid</td>
<td>Latexity improver</td>
</tr>
</tbody>
</table>

Distributed in Austria, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Latvia, Lithuania, Macedonia, Norway, Poland, Portugal, Romania, Serbia, the Slovak Republic, Slovenia, Sweden, Switzerland and Turkey.

High-performance quality in adhesive bonding means faster building and, in turn, higher levels of productivity. This is exactly where CaFo tech from Perstorp comes in, with its ability to improve the bonding process in many different ways. Using the CaFo tech accelerator in the adhesive achieves larger gap times in which tiles can be laid. This allows for larger areas to be prepared, boosting productivity significantly. CaFo tech also acts to minimize void formation, which does not reduce adhesion permanently and reduces its adhesive strength.

The additive accelerates the hardening process by up to 30 percent and thus ensures much better adhesive and tensile strength early on. Due to its high quality, CaFo tech optimally balances the opposing properties of having prolonged open times and early adhesion and tensile strength. The resulting longevity of the applied tile also plays a role in its water stability, and ideas that are laid with CaFo tech software perfectly in very humid environments. They also comply with EU standard for usage in such areas. This makes CaFo tech an ideal choice for use with bathroom, shower and swimming pool tiles due to its high quality, CaFo tech is chloride-free and can therefore be used in adhesives applied to concrete.

The CaFo tech facilitates practical application, giving adhesives a creamy and even consistency and making them easier to work with. Being a white, crystalline substance with an optimum particle size also ensures that it dissolves easily and efficiently. Additionally, CaFo tech has been specially processed to be additive-free, meaning it is well-suited for indoor use. CaFo tech is chloride-free and therefore be used in adhesives applied to concrete.

Working in close cooperation with the road construction industry, KAO has made KAO one of the leading producers of bitumen additives in the European market for over 50 years. Throughout this period, the company has developed and sold various fatty amines and derivatives for many different road bitumen treatments, either for new construction or maintenance. KAO’s extensive additive portfolio includes butylamine derivatives for rapid-, medium-, and slowly setting bitumen emulsions, antistripping agents, waxes, fatty and reparation oils. KAO also produces antistripping emulsions such as ASFIET® A-50, which provides stable emulsions for the construction industry (bitumen paints, sealants, waterproofing etc.) and dust control.

KAO’s Bitumen Additives

KAO Corporation’s ASFIET®, ASFIER®, DANOX®, and GRIPPER® product lines are used to produce high-quality bitumens and asphalt mixes.

Innovative and sustainable solutions

KAO’s Bitumen Additives are based on ethylenediamine derivatives and offer several benefits over traditional bitumen emulsifiers. They include:

- **Performance enhancements:** KAO’s solutions improve the stability, adhesion, and durability of bitumen emulsions.
- **Environmental benefits:** These products are environmentally friendly, reducing the carbon footprint and water consumption in their production.
- **Versatility:** They can be used for a wide range of applications, including road construction, maintenance, and dust control.

KAO’s Bitumen Additives are distributed in Austria, Germany, and Switzerland, showing the company’s commitment to providing sustainable and effective solutions to the global road construction industry.

Distributed in Austria, Germany and Switzerland.
Nouryon

On October 5, 2019, AkzoNobel Specialty Chemicals relaunched itself as an independent company under the name Nouryon. The move follows the acquisition of AkzoNobel Specialty Chemicals’s business by The Carlyle Group and marks the former’s transition to becoming an independent, global specialty chemicals leader focused on innovation, sustainability and creating strong partnerships. The NRC Group continues to manage distribution of the newly renamed company’s products in both Germany and Switzerland, as well as most of the Nordic countries.

Although this is a new company, Nouryon has a history that stretches back nearly 400 years. Its name and brand identity link back to its heritage; Nouryon & Van der Lands being one of the first companies to use the essential raw that chemistry could offer for everyday life. The pioneering spirit of Nouryon & Van der Lands continues to inspire Nouryon to lead the way, to grow together and deliver on its commitments.

The company’s core values of safety, integrity and sustainability remain at the center of its business. Nouryon works hard to find innovative and sustainable ways of helping its customers and partners realize their ambitions and it applies this same diligence to its own operations, constantly striving to improve the way it operates.

With over 10,800 employees worldwide operating across more than 80 countries, Nouryon has the global experience, expertise and innovation to help customers enhance their building, construction and paper applications. Nouryon’s extensive portfolio allows the best solutions to be found for any specific need.

Polygal AG

Customized hydrocolloids for technical applications

Interest in alternative and above all natural raw materials is constantly on the rise, due to increasing ecological concerns and also the ever more complex requirements of technical applications. This is where Polygal AG, with 80 years of experience in the utilization of natural hydrocolloids, can step to offer practical and innovative solutions. Nordmenn, Reussmann GmbH has been available distribution partner for the company for many years.

Under the brand name POLYCOL®, a variety of customized vegetable hydrocolloids are now being used around the world in a diverse range of technical applications. With the help of various chemical processes, natural raw materials such as gums or tannins are being modified and optimised for the specific applications they are needed for.

Polygal AG’s care partnerships are based on the company’s many years of experience in the field of hydrocolloids and their applications, as well as in practical research and development. In close cooperation with customers, and utilizing industry-specific know-how, Polygal AG is committed to the continuous development and further optimization of its products and processes. In addition to providing customer-specific solutions, Polygal AG also relies on its proven product portfolio of chemical specialties. A variety of hydroxypropyl guar products, for example, are supplied under the brand names POLYCOL® WP and POLYCOL® T, as rheological additives for the formulation of building materials, plastics and paints.

Product highlights include:

- POLYCOL® WP-019: Viscosity with starch

Cost implications for mineral applications and aqueous formul- ations can be significantly reduced by using these products without significantly affecting their final viscosities.

- For hydroxypropyl guar products, POLYCOL® T-08 H is characterized by having an exceptionally high water retention capacity. Its special rheological properties also improve stability and processability in mineral-based systems. The product has already proven itself in prac- tice – especially in the application of gypsum plasters and putty systems. A number of different forms of cellulose derivatives, special starch ethers and modified starch ethers are used in this area. Sarcode is one of the most important players in this sector.

- In addition to fillers, dispersion powders and a mineral binder (cement or gypsum), leveling compounds also con- tain rheological additives: cellulose and starch ethers. The cellulose ethers provide basic thickening and good water retention properties, while starch ethers significantly enhance the suspension properties and the thickening effect. This is primarily used for applications such as leveling compounds, in which water retention and abrasion resistance must be prevented without significantly affecting their final viscosities.

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ULTRAMARINE 16, ULTRAMARINE 17, ULTRAMARINE 58

Intense colors in all weather: ultramarine pigments from Venator

VENATOR

At the 2019 European Coatings Show in Nuremberg, pigments and performance additives from Venator will be presented. Venator will be promoting its diverse portfolio of products geared specifically to the formulation of technically advanced coating systems, including a range of acid-resistant ultramarine pigments. The NRC Group is responsible for distributing these high-performance pigments in several European countries.

Venator’s wide spectrum of color for coatings includes a premium range of Copperfax® products. Combining high chemical purity with exceptional mill stability, these pigments deliver intense color alongside good chemical stability, very high heat resistance and excellent suspension properties. Shades range from the brightest ultramarine through to the darkest and bluest red. Titanium dioxide formulations: As a leading producer of titanium dioxide, Venator knows the chemistry of this naturally occurring mineral inside out. For the coatings industry, the NRC Group’s partner offers a wide range of high-quality titanium dioxide grades that can deliver UV protection, make Solvent-safe paints self-cleaning and create high-cut, high-impact colors even when combined with metal flakes. Venator also makes specialized titanium dioxide pigments for the ink industry.

Coatings additives: Venator also produces a number of specialist additives for the coatings industry that can improve spattering retention for individual layers. Venator’s coating’s mechanical properties and achieve improved color stability, intensity and brilliance. The company’s range includes BLANC FIELD™ and SACHSFIELD™ barrier auxiliaries plus Lithopaque, a zinc sulphate and borax solution mixture.

Anti-skimming agents and thickeners: To help formulators produce paints that are bright, vibrant and that dry fast, Venator has created a range of anti-skimming and anti-skimming agents that comply with the very latest industry rules and regulations. These innovative products can be used to achieve in-can stability and drying properties that consumers expect, without affecting overall paint quality and finish.

By selecting appropriate dispersing agents, viscosity can be optimized for production and storage. In addition, deep black colors can be produced with a variety of commercially available pigments that do not dry up during storage (see Figure 3). Thanks to the different macromolecules in polymeric molecular structures, all other common inorganic and organic pigments can be ground and processed into stable pigment concentrates. NUOSPERSE® FX 7500W has a strong stabilizing effect in stabilizing the groundpigments.

Venator’s acid-resistant ultramarine pigments are part of a wider family of blue, violet, and pink pigments developed for use in industrial and household coatings. Added to formulations in small amounts, the ultramarine blue pigments can counteract the inherent yellowish tint of paints and coatings – making white products appear cleaner and whiter. These blue pigments can also enhance the gloss of black paints. Venator also offers ultramarine violet pigments for the production of near-white tone used in combination with Venator’s ultramarine blue products, these pigments can be used to create a color effects that are applied over powdered metal, aluminium flakes and pearlescent base coats.

Distributed in Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Poland, Romania, the Slovak Republic, Slovenia and Switzerland.

NUOSPERSE® FX 7500W

Deep black color with NUOSPERSE® FX 7500W

Black color concentrates present challenges for formulators of aqueous systems, but ELEMENTIS has launched a new dispersing additive for aqueous industrial applications with impressive, high-performance quality: NUOSPERSE® FX 7500W. The NRC Group markets this new ELEMENTIS product throughout several European countries.

Figure 2: White acrylic paint with 3% pigment paste and NUOSPERSE® FX 7500W (left) and control (right).

In a white mixture, good color depth is achieved with low black content. Venator’s ultramarine pigments can also be used to create the bright blue ultramarine blue pigments developed for use in industrial and household coatings. Added to formulations in small amounts, the ultramarine blue pigments can counteract the inherent yellowish tint of paints and coatings – making white products appear cleaner and whiter. These blue pigments can also enhance the gloss of black paints. Venator also offers ultramarine violet pigments for the production of near-white tone used in combination with Venator’s ultramarine blue products, these pigments can be used to create color effects that are applied over powdered metal, aluminium flakes and pearlescent base coats.

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ACRILEM® ST186, ACRILEM® ST186F, ACRILEM® ST186HV, ACRILEM® ST187

Styrene acrylic emulsions with low MFFT for highly elastic coatings

Ftone GMW 605, Daikin has also developed environmentally friendly aqueous systems. In this case, the problem area is to incorporate an actual hydrophobic material into an aqueous solution/emulsion. With Ftone GMW 605, Daikin succeeded in developing a fluoropolymer with very good water- and oil-repellent properties in water.

Figure 1c: Using Ftone GMW 605 to prevent various types of dirt pick-up and stickiness are also guaranteed for more mineral surfaces.

Figure 1b: Comparison of penetration depth of emulsions and acrylic sealants, in which elasticity is a key factor. Low temperature, the binder allows for formulations with low or even zero coalescing agents. This makes it possible to produce paints and sealants with lower VOC content and therefore loss of an environmental impact, which satisfy 2004/42/EG regulations. ACRILEM® ST186 also takes advantage of a new technology in which emulsion promoters are inserted directly into the polymer chain. While improving adhesion on mineral substrates, copolymerization of the emulsion promoters prevents their hydrolysis and wash-off in addition to promoting stability in the first phase of processing. Furthermore, water resistance and wear-resistance are also improved. These advantages have been recognized and evaluated by most customers around Europe, making ACRILEM® ST186 a widely appreciated and reliable standard in the paints industry.

ACRILEM® ST186 is also available in the following variations:

ACRILEM® ST186 Freihaltemix-Stabilized reactive/broyle-free version

ACRILEM® ST186F: aromatic and broyle-free-hyv version

ACRILEM® ST186HV: high viscosity version (8000-18000 mPa*s)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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In the most recent addition of alkylphenol-ethoxylates (APEO) to Annex XV of the REACH Regulation prevents the use, production and import of these surfactants starting on April 1, 2023. For that reason, Daikin has now developed new acrylic and styrene-acrylic emulsions like ACRILEM® ST186 that are based on APEO-free surfactant technologies. The low glass transition temperature (Tg) of the ACRILEM® ST186 polymer allows it to be used in products such as electronic paints, roof-coating membranes and acrylic sealants, in which electricity is a key factor. Low dirt pick-up and stickiness are also guaranteed for more traditional coatings applications.

Thanks to ACRILEM® ST186’s low minimum film forming temperature (MFFT) and low resistance film forming temperature (MFFT) from the research laboratories of IAPC-SIRA Chemicals and Polymers S.p.A. (IAPC-SIRA), one of The NRC Group’s partners from Italy.

Metalllic soaps in the form of oxides and slates have been used successfully for years as hydrophobating agents in a variety of dry mortars such as plasters, joint mortars, fillers and also as adhesives. Hydrophobating agents prevent moisture from penetrating into brick, plaster or concrete and causing damage there, thereby prolonging the service life of the treated material. This is particularly important for effective mold and fungus control. The advantages of metallic soaps are also evident in tile-laying, as they allow for a longer open time. This means that more tiles can be laid in the same period and labor costs can be saved. Faci offers seven different production sites in Europe, the USA and Asia and is very well-positioned in the field of metallic soaps. With its extensive product range, the company can provide the optimum solution for every application as well as the most diverse substrates. Faci’s portfolio includes both reactive and non-reactive metallic soaps. Depending on the application, non-reactive and reactive mortars are produced in powder form such as Faci calcium carbonate Type S, Type SW and Plascrete; Faci zinc stearate Type N and Type TM, and Faci magnesium stearate Type S which achieve a particularly potent hydrophobic effect if they are intensively mixed in and well-distributed in the matrix. Reactive, water-soluble metallic soaps such as Faci’s sodium stearate in powder form (Type S) and in granulate form (Type SP) hydrophobate through a chemical reaction between the alkali soap and other individual components of the dry mortar. Combinations such as Faci Casaretto, Faci Edilmag and Faci Edillube are all characterised by particularly rapid hydrophobation.

Faci, a 50% calcium stearate dispersion, is particularly effective in building mortars and grouts and is used in concrete as a hydrophobic agent and to downstream inertifiers. Distributed in Austria and Germany.
Successful industry event: Nordmann, Rassmann Hungaria Kft.

From 27-28 November 2018, the biggest names in the paints, varnishes and coatings industry were in Shenzhen, China for an innovative trade show and exhibition event. The first international Hungarian company organized by the Hungarian Chemical Society and Budapest Business Kft. back in 1993, with the 2018 show marking its tenth anniversary. Nordmann, Rassmann Hungaria Kft. participated in the exhibition with its co-exhibitors ELEMENTS and Eckart.

The Hungarocast, showcases new materials, equipment and testing devices for the paint industry as well as news from the fields of research and development, consulting, technology, planning and quality assurance. The exhibition also features lectures on the latest developments and trends in industrial coatings and surface protection. Nordmann, Rassmann Hungaria Kft. co-exhibitors impress the eager visitors with two keynote presentations. Udo Schneidt, Technical Sales Manager at ELEMENTS, gave an informative talk entitled “RHEOLATE® HX: highly effective associative thickeners for aqueous paints and varnishes”, while Christian Schramm, Technical Sales Manager at ECKART, presented zinc flake-based corrosion protection varnishes with reduced heavy metal content.

Pressing networking 

“For us, the Hungarocast event is always a fast and important data on our calendar,” said Ágnes Fekete, Managing Director of Nordmann, Rassmann Hungaria Kft. “Together with our co-exhibitors, we can help to new customers and talk to our existing partners about future projects.”

D.E.R.™ 6508, 6510HT, 6615, 8230W5

Distributed in Austria, Bulgaria, Croatia, the Czech Republic, Denmark, Finland, Germany, Hungary, Italy, Romania, Serbia, the Slovak Republic, Slovenia, Sweden and Switzerland.

New melamine superplasticizers with low formaldehyde content

Melamine superplasticizers have been recognized and used as important admixtures in the modern construction industry for years as they regulate the consistency of concrete and reduce the amount of water that needs to be added in it. The NRC Group distributes the new low-formaldehyde products from Switzerland-based manufacturer Melanin AG. Rassmann Hungaria GmbH now offers European customers:

- Melanin AAS 600S
- Melanin AAS 604S
- Melanin AAS 405S

This new Melanin AAS product line is available on the EU market and, according to the current CLP Regulation, does not require labeling as a hazardous or dangerous substance.

Melanin AAS 1085S is a low-formaldehyde conditioner that is available in powder form for use in dry mortars applications such as floor screeds, levelling compounds, grouting mortars, etc.

Distributed in Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Poland, Romania, Serbia, the Slovak Republic, Slovenia and Switzerland.

Halogen-free flame retardants

Nordmann, Rassmann GmbH again expands portfolio of halogen-free flame retardants

Nordmann, Rassmann GmbH continues to expand its portfolio of flame retardants, smoke suppressants, flame retardant masterbatches for the full range of industrial applications. Since the beginning of this year, Nordmann, Rassmann GmbH has been exclusively distributing halogen-free flame retardants (HFFR) from Metadynea Austria GmbH in Germany. Metadynea’s portfolio of HFFRs provides an ideal complement to the existing product range supplied by Nordmann, Rassmann GmbH.

With the introduction of CARADOL E1010-200, the market requirements for low VOC can now be fulfilled. The new product has been a part of Shell’s CASE portfolio since November 2018. Only recently, Shell introduced CARADOL E1101-200 into the market. CARADOL E1101-200 is a polypropylene glycol (molecular weight: 1000 lb/mol, formerly known as CARADOL E1101).

Halogen-free flame retardants are compounds using non-halogen-based compounds to improve fire safety properties of materials. Metadynea's recent developments in this field are used in various applications and industries.

The introduction of CARADOL E1010-200 and CARADOL E1101-200 marks an important step for the company in terms of sustainability. These products provide the same fire performance as conventional halogenated flame retardants, while being more environmentally friendly.

To learn more about Olin’s high-quality products, please contact The NRC Group’s expert team or visit Olin at the 2019 European Coatings Show in Hall 4 of Booth 4-A122.

Distributed in Austria, Germany and Switzerland.

New low-VOC polypropylene glycol polyls using proprietary low-monol technology

Shell polyether polyls are used for manufacturing polyurethane (PU) coatings, adhesives, sealants and elastomers in a wide range of applications. The polyols from the Netherlands-based company Metadynea are available on the European market for use in a variety of industries and applications, including automotive, construction, and coatings applications. With its CASE portfolio, Shell’s ambition is to be as close as possible to the requirements of the market and to ensure that customers are also looking for opportunities to contribute to a more sustainable PU business with a wider range of products.

One of the recurring trends in the PU market is the need for new CARADOL products which would provide lower VOC levels in a range of compounds and thereby also improve the sustainability of PU films and applications. A first step towards meeting this demand was the introduction of a new and continuous DMC-catalyzed production process.

By stepping away from the conventional KDH process, the first polyol poly with low-molecular and low-VOC – called CARADOL E1010-200 – was commercially produced in 2008. Since the catalyst-removal step is not required, a significant step was made in reducing filter waste and thereby contributing towards a more sustainable process.

In continuing to change conventional KDH processes into more sustainable DMC-based processes, two other grades were developed using DMC technology between 2017 and 2019. These grades were CARADOL E1050-200 and CARADOL E1100-200, both polypropylene glycols with molecular weight of 8000 Da and 6100 Da, respectively.

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Fire retardants

JLS opens world’s largest APP flame retardants production site in Jiangshan

The award for halogen-free flame retardants that most demanding safety and environmental requirements is continuously on the rise. JLS, a partner company of The NRC Group, is now doubling the production capacity of its APP flame retardants at its existing production facility in Jiangshan, resulting in a high level of supply security as well as price stability for customers. JLS will be showcasing its products at the upcoming ACS EXPO in Nuremberg.

The Chinese manufacturing company JLS Flame Retardants (Chemical Co. Ltd. (JLS) supplies a wide range of Flame retardants for applications in engineering plastics, coatings, textiles, construction, adhesives and more. With the opening of its new production facility, JLS now offers an extended portfolio of its branded products by developing innovative halogen-free flame retardants for industrial applications.

Metadynea Austria GmbH is the cooperates with Nordmann, Rassmann GmbH in the area of flame retardants. The cooperation between the two companies has been successful since 2016, where Nordmann, Rassmann GmbH has been exclusively distributing melamine-based flame retardants (HFFR) from Metadynea Austria GmbH in Germany. Metadynea’s portfolio of HFFRs provides an ideal complement to the existing product range supplied by Nordmann, Rassmann GmbH.

Melamine APP-series products are designed for use in modified polypropylene glycol (MAPP) applications. They are designed for use in combination with Metadynea’s or other melamine APP-series products. They are designed for use in combination with Metadynea’s or other melamine APP-series products.
The NRC Group at the in-cosmetics® in Paris

The next in-cosmetics® Global will take place in Paris from April 2 to 4, 2019. The fair is regarded as the leading international platform for the personal care industry.

NRC will again offer a lab session (April 4, 9:30-10:30 a.m.) and present news from its own laboratory. In addition, the company will participate in the Sensory Bar, where it will present three new formulations that can be tested by visitors. You can find The NRC Group at Booth V119.

Melrob at the Vitafoods™ Europe in Geneva

At Vitafoods™ Europe in Geneva, Switzerland, everything revolves around functional foods and dietary supplements. For The NRC Group, the Melrob Nutrition team will be participating from May 7 to 9 2019. Visitors can find out more about the extensive product portfolio at Stand S155. The main focus will be on new product formats and new opportunities in the field of product development.

Melrob Nutrition specializes in the development of innovative dietary supplements, their packaging and distribution and the manufacture of trade labels, thus offering companies a complete package. As one of the leading British distribution companies for dietary supplements in a wide variety of manufacturing methods - liquid, capsules and tablets - Melrob Nutrition advises visitors with its expertise in formulation, production, regulatory requirements, packaging and distribution.

The NRC Group: Fairs & Events in 2019

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The NRC Group

Nordmann, Rassmann GmbH
Kajen 2 · 20459 Hamburg
Phone: +49 40 36 87-0
Fax: +49 40 36 87 249
info@nrc.de · www.nrc-group.com

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