MROWANCVS

NEWS FROM ROWA GROUP

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Kai Müller Managing Director ROWA GROUP

Dear Business Associates, Ladies and Gentlemen,

In the fall, everything will revolve around the Fakuma, which despite its size and international appeal has become an almost family get-together with well-known partners. We are once again looking forward to our loyal guests across all corporate hierarchies. The constructive talks are influenced by the very good personal contacts between our colleagues in sales and industry. The almost legendary hospitality of the ROWA GROUP also helps create a particularly enjoyable atmosphere, and thereby the perfect surroundings for an exchange among experts.

Even though there is cause for celebration - the figures for the first six months of 2017 are more than just satisfactory - we will also discuss topics that are of concern to us. These include the discussion about titanium dioxide TiO_a, which could lead to it being marked with the H statement H350i. We very much hope that the industry will pull together in its search for a reasonable solution and we are committed to finding a sustainable, appropriate arrangement together with the Masterbatch association.

Product safety and sustainability in the production chain always take first place for us in the interests of our customers. We, therefore, monitor all developments very closely and work in a particularly foresighted way. This also applies for our sourcing, which we place on a broad footing so as to counteract any shortages due to worldwide consolidation, for example. In this way, we keep the risk for our customers as low as possible and we always ensure that they get the best result.

I sincerely hope that you enjoy reading this latest edition of our ROWAnews and I very much look forward to seeing you at the Fakuma!

With best regards, Your Kai Müller

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Resistant to heat and chemicals: Luranyl[®] HT PPE+PA blends



numerous aggressive substances, such as oils and glycol, in heating and engine design. With Luranyl® HT, ROMIRA offers a product group to satisfy these requirements. It not only has high resistance to hot water combined with a high heat deflection temperature, it also absorbs rather little water, which is a beneficial feature for ensuring problem-free processing.

Luranyl[®] PPE+PS-I is the first choice when excellent resistance to hydrolysis and stability against hot water, acids, and alkalis is needed. Apart from these properties, the ROMIRA product is also resistant to detergents and alcohol, a combination that few other materials can offer. Furthermore, the moisture absorption of Luranyl® is much lower than comparable engineering plastics. Even the most complex of parts can be produced using

- High demands are made on resistance to heat and 1. The extremely resistant Luranyl® HT 190 is primarily used in connecting parts for flexible hoses in the sanitary and heating industries. When used in air-conditioning systems, the product has to withstand a variety of chemical substances: water, glycol, silicon oil, mineral oil with dimethyl sulfoxide, and lube oil with zinc dialkyldithiophosphate. These outstanding properties make Luranyl® HT 190 the best choice for these applications, surpassing even the commonly used polysulfone (PSU).
 - 2. Luranyl® HT 220 G6 is a PPE+PA reinforced with 30 percent fiberglass. Having good chemical resistance in combination with very high stiffness and excellent heat resistance makes this an attractive solution for products such as engine covers. These parts have to withstand not only brake fluids, greases, and



Luranyl® with very little distortion and the narrowest of tolerances. These are key properties that hardly any other thermoplastic material can offer.

Luranyl[®] PPE+PS-I over many hours is approx. 90°C. For higher temperatures, but with just as much chemical resistance, for example to aliphatic and aromatic hydrocarbons, greases, fuels, and detergents, ROMIRA's portfolio includes Luranyl® HT PPE+PA. This product has a Vicat softening temperature of up to 240°C, making it an ideal material for powdercoating - a process in which temperatures of approx. 200°C are reached. Luranyl[®] HT PPE+PA grades are also resistant to a number of organic solvents. The following three applicationexamples highlight its versatility:

lubricants but also exposure to high temperatures. Luranyl® HT 220 G6 is the right choice for such demanding conditions.

The continuous service temperature of reinforced 3. Thanks to its electrical conductivity, Luranyl® HT 190 LF is ideal for use in powder coating applications, such as fuel filler caps. What's more, the material is easy to process, thereby enabling lower reject rates and making production more economical.



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02



Switching beautifully

Intelligent building control, classic electrical engineering, and top quality installations combined with estheticdesign"MadeinGermany": Albrecht Jung GmbH & Co. KG from Schalksmühle in western Sauerland needs some strong partners for realizing these goals. ROMIRA is one of them. The ROMIRA development team came up with a product solution together with the technicians from JUNG that guarantees higher UV protection providing a long-term stable, white tone for switches and sockets.

This example shows the path that ROMIRA wants to take in the future. "We are much more than

just automotive", emphasizes the managing director Stig Lindström. "The fact that we have extended



the existing applications and strengthened our development team over the past few years in the fields of consumer and industrial goods has already paid off." The designers, colorists, and product developers were also able to collaborate with the firm of JUNG through individual advice, experience of light fastness, and flexible service. It was particularly impressive that the customer was able to follow the final color matching process live on site in the Color Competence Center.

"Together with the competent colorists from ROMIRA, we were able to test the color settings in various kinds of light, such as

daylight or artificial light and assess these from different angles", says Jochen Schmidt, team leader for plastic technology and design at JUNG. The result is quite astounding: the white tone blends in perfectly with the company's existing portfolio of colors and is resistant to the influence of UV radiation. Therefore, the light switches, sockets, and covers not only have a longer service life, they retain their colors too.

"With our technical possibilities and our employees" know-how, we develop specific solutions for all industries and sectors in equal measure," says Lindström. "Whether for the fields of automotive, electrical and consumer goods, or medical and laboratory engineering - our experts come up with individual solutions that perfectly match our customer's product requirements."

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ROMIRA

Simply high-gloss

High-gloss surfaces with no need for additional finishing - a trend that is currently challenging the plastics industry. This is possible with Variotherm technology (also known as a heating and cooling molding (RHCM)). In this process, the molding compound is injected at a much higher mold temperature that is beyond the softening point of the plastic. The high temperature that is used delays solidification in the boundary layer area of the component until after the mold has been completely filled during the holding pressure phase. Thanks to the higher mold temperature that is used during the injection process, the plastic material remains molten at the mold wall for longer so that phenomena such as the formation of bubbles, weld lines and the like are suppressed. In order to obtain adequate release stiffness after injection and to avoid a drastic increase in the cycle time, the mold insert is cooled after injection. This is achieved by a close contour and homogeneous temperature control of the mold.

The Variotherm process allows the production of components with a high quality gloss surface finish and improved material structure that is free from common de- plastic products with the correct colors and a valuable fects, such as weld lines, sink marks, and other surface high-gloss look that is tailored to the requirements on inconsistencies. This form of processing also offers

further advantages with respect to the mechanics and geometry of the moldings (see table). This opens up unimaginable new design possibilities for product designers. For example, reinforced plastics with a completely smooth surface finish without the need for additional painting (see photos) can be produced using Variotherm, thereby enabling those parts to be used in visible cosmetic applications. Apart from new design options, additional post-molding process steps for some parts can be reduced by using the Variotherm procedure thereby saving time and money. For glass fibre reinforced styrene-based copolymers and their blends, as well as Luranyl products, Variotherm provides a good alternative to the more complex 2-component injection molding process. Advantages also arise in the case of microstructured geometries as well as macroscopic parts with a low wall thickness. Complex parts can be cast by preventing a premature solidification of the melt.

ROMIRA is happy to advise its customers on these and other topics. This allows the production of individual the end product.

	@ Mr. B*king/shutterstock.com				
Property	Advantage				
Mechanical	Higher crystallinityLower stress				
Surface	 Improved gloss Avoidance of visible weld lines Improved surface quality for foamed and fiber-reinforced parts (visible area) Reduction of sink marks (longer holding pressure) Casting of the finest structures (micro, nano) 				
Geometry	Improved contour accuracyLess post-shrinkage				
Filling behavior	Flow distances and thin walls in thin- wall and micro-injection molding				

Advantages for molding with the Variotherm process with a high mold temperature.





Illustration of heat removal achieved by cooling the molding using a cold respectively hot tool.

ROTEC AC-MA EXP2694 GF10-Comparison x200



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The rubber makes the difference

Styrene copolymers are in great demand around the world because of their versatility and the correspondingly high number of possible applications – and there is no end in sight. ROMIRA is strongly investing in improving the existing products and developing new, innovative product solutions as a compounder for specialties. The company currently offers a range of styrene copolymers: SAN, ABS, MABS, ASA, and AES as well as their blends. The common feature in all of these is SAN (styrene-acrylonitrile copolymer), which provides thermal stability, surface hardness, and a good processability. The additional component is the respective rubber, which is critical for the wide range of applications of styrene copolymers.

A differentiation should be made here between three groups: ABS, ASA, and AES. ABS (acrylonitrile butadiene rubber styrene) is the most important technical plastic in terms of quantity. On account of its high ambient and low-temperature impact strength, ABS offers good dimensional stability, even under high stress. Due to its cost efficiency and good balance of properties, ABS is the standard material for applications in the fields of electrical engineering and electronics (E&E), toys, and automotive interiors. Apart from the use of ABS as a standard material, it also has special characteristics. Flame-retardant ABS types can be found in the product portfolio of ROMIRA alongside specially modified High-Heat types for applications that make high demands on the material's heat resistance. Furthermore, the surface properties of the ABS can be selectively adjusted and functionalized. Metallization, for example, allows for the production of metallic finished surfaces, such as those found in the sanitary and automotive sectors.

ASA (acrylonitrile acrylate rubber styrene) has not only excellent mechanical properties but also better resistance to UV and weathering than ABS. It is, therefore, the standard plastic when it comes to outdoor applications. Thanks to its outstanding UV-resistance, a key property of the product class, ASA has established itself for use in external automotive parts and in the field of recreation and sports. ASA also displays great potential in the production of various extrusion profiles for the building and construction industry.

A lesser known member of the styrene copolymers family, AES (acrylonitrile EPDM rubber styrene), has attracted little attention on the market to date. AES combines the advantageous properties of ABS and ASA – good impact strength together with excellent resistance to UV and weathering – making for an interesting properties profile. Accordingly, AES is a very good solution for applications requiring both good mechanical properties and high durability under the effects of weathering. The fields of application for AES are particularly versatile – from roofing materials, garden furniture through to radiator grills and door sections.





ROMIRA is one of the few companies worldwide to offer AES as a further product solution alongside ABS and ASA. Together with the other styrene

		loor condition							
unnotched impact strength (Charpy)	DIN EN ISO 179/1eU	80 x 10 x 4 mm 23 °C/-30 °C	kJ/m²	o.B. / o.B.	o.B. / o.B.	o.B. / o.B.			
notched impact strength (Charpy)	DIN EN ISO 179/1eA	80 x 10 x 4 mm 23 °C/-30 °C	kJ/m²	32 / 16	22 / 7	34 / 9			
unnotched impact strength (Charpy) after 800 h weathering*	DIN EN ISO 179/1eU	80 x 10 x 4 mm 23 °C/-30 °C	kJ/m²	33 / 4	o.B. / 33	o.B. / 58			
color change after 800 h weathering*				-	+	+			
*Weathering was carried out in accordance with DIN EN ISO 4892-2 cycle 1.									



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04 **ROWA** news

A clean sheet

Titanium dioxide (TiO₂) counts as the most important white pigment. In paint, it is used for white walls, in paper for better printability, and in sunscreen to protect our skin against UV radiation. Special forms of titanium dioxide are also used as photocatalysts, for example in pollutant degradation. This inorganic substance, which is primarily produced and processed in the crystal forms anatase and rutile, is also indispensable within the plastics industry in plastic applications. Around 95 percent of all RAL color shades are adjusted with the help of TiO₂.

No other pigment can match titanium dioxide when it comes to the degree of whiteness and opacity - not forgetting the unique UV-protection properties. In 2016, approx. 1.4 million tons were produced in Europe alone, 480,000 tons of which were made in Germany.

However, the clean sheet could become stained. In November 2015, ANSES submitted a dossier to the ECHA for a harmonized classification ("legal classification") of titanium dioxide. This suggests a classification as "carcinogenic if inhaled", category 1B. The consequence of this would be a requirement for labeling with the H-statement H350i.

On June 8, 2017, the RAC of the ECHA thus recommended classifying titanium dioxide as a substance.

The next step is now a political discussion in which socio-economic arguments can also be forwarded. A final decision is expected around the end of 2018.

ROWA Masterbatch and many other companies and organizations regard the suggestion as unreasonable. These also includes the Masterbatchverband, a specialist department of the VdMi, in which a further 21 masterbatch producers are organized alongside the founding member ROWA Masterbatch.



Various reasons can be cited for this opinion:

- Epidemiological tests performed over decades on more than 20,000 employees involved in the production of titanium dioxide do not indicate any problems.
- The results of the "lung overload" studies on rats, to which the ANSES refers, cannot be transferred to humans and these studies are over 20 years old.
- · Since health and safety regulations already exist for titanium dioxide in the form of workplace limits for dust, a harmonized classification can be regarded as inappropriate.

Furthermore, it has to be remembered, for users of products such as masterbatches and compounds, that titanium dioxide is firmly embedded in a plastic matrix and is thus immobilized - in this case, one talks of a so-called encapsulation principle. This means that no dust generation exposure is to be expected.

A harmonized classification would nevertheless lead to significant restrictions on the use of titanium dioxide and greatly increase the effort and costs of its production, processing, marketing, and disposal. This would also apply for products that do not contain titanium dioxide in powder form. Uncertainties are already noticeable in various sectors of industry.

Since product safety is taken very seriously at ROWA Masterbatch, our customers have a strong partner at their side that is following the developments in this process in great detail. ROWA Masterbatch will, of course, be happy to answer any questions its business partners may have on this topic.

ANSES: Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail -French National Agency for Food, Environmental, and Occupational Health & Safety

ECHA: European Chemicals Agency

Statement H350i: H-statement in the CLP Regulation (EC) No. 1272/2008 - H stands for hazard

VdMi: Verband der Mineralfarbenindustrie e.V. (German association of the mineral pigments industry)

More information

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The new website initiative-pro-titandioxid.de provides further information about titanium dioxide and the classification procedure. It has been online since the middle of June and is operated jointly by the Verband der deutschen Lack- und Druckfarbenindustrie e.V. (association of the German lacquer and printing ink industry - VdL) and the Verband der Mineralfarbenindustrie e.V. (German association of the mineral pigments industry - VdMi).

\mathbf{CCC} + COLOR COMPETENCE CENTER

MASTERBATCH Do it yourself: color POM yourself

POM is a typical technical thermoplastic with good This particular material, which is polymerized on the bamechanical properties and high dimensional stability and it exhibits excellent low friction and good wear behavior. This material is, therefore, one of the most popular construction materials and it is used for numer-

ROWA 🐠

sis of formaldehyde, tends to release harmful formaldehyde in unfavorable conditions, for example through an interaction with an unsuitable carrier material.



ous applications in medical and electrical engineering, automobile manufacture as well as for parts in precision engineering. The market has enjoyed a positive development for many years.

This material is primarily provided by the major polymer manufacturers either uncolored or colored black. Coloring POM yourself is, therefore, traditionally very important.

This is where ROWA Masterbatch comes in as a long-standing expert for polymer-specific color batches. The masterbatches based on POM guarantee the greatest possible retention of the polymer's physical properties, unlike universal batches based on carrier materials that are not ideally matched to POM.

Very important: the ROWALID [®] POM portfolio includes color batches based on both homo- and copolymers.

With the ROWALID[®] POM product group, ROWA Masterbatch provides not only a sophisticated solution for self-coloring but also offers processors some major economic advantages: by purchasing larger, lower cost, volumes of the uncolored product, the raw material expenses are significantly reduced. This also allows for greater flexibility and shorter changeover times – which has a great impact, particularly with frequent color changes.

Therefore, ROWA Masterbatch constantly extends the range of ROWALID® POM color batches in close cooperation with its customers.



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Color 4.0: color references in the plastics sector

Color is an eminently important quality criterion for a large number of components. The human eye can differentiate between up to ten million color shades. This is why, when considering adjacently installed parts (e.g. inside vehicles) or for products with a high recognition value, the color match must be the best possible. The color is usually chosen on the basis of corresponding color samples. So-called RAL, Pantone, or NCS systems are frequently used.

The Color Competence Center (CCC) of the ROWA GROUP has a number of color systems: these include the RAL, NCS, and Pantone schemes. The colorists only need to know the edition (year of manufacture, details of the surface) of the corresponding color system to commence color development.

With the help of modern data communication, the customer can also receive a customized color setting with electronic color targets from the CCC even without a visual sample.

Since the analyses and certifications are assessed in quality management systems in accordance with DIN, ISO, or according to other regulations, an objective check must be carried out with a colorimeter. The aim here is to find a color measuring system that satisfies the requirements of a particular industry. Taking the automotive industry as an example, the colorimeter that is used should also be capable of reliably checking against narrow tolerances. The Konica Minolta spectral photometer CM-25cG adequately satisfies these "Close Tolerance (CT)" quality requirements.

The basic color sample can be analyzed colorimetrically with the corresponding measuring geometry. The data contains not only the L*a*b* values but also the spectrum of which basis the recipe is calculated by using the recipe software. In general, it must be remembered that, apart from the raw materials specifications, the different carrier materials as well as production-specific parameters must be taken into account. Therefore, the metamerism-free calculation of the recipe must also give consideration to the different plastic types used as carrier materials. To obtain ideal recipes, the parameters are also adjusted to suit variables, such as layer thickness, processing conditions as well as further



influences, such as the temperature, surface texture, friction resistances, and specific pigment behavior.

Apart from the color, other criteria such as the gloss are also relevant for the overall visual impression of products. The CM-25cG can measure gloss at the same time as the color. This opens up new possibilities for quality control thereby enabling the most varied of the industry's specifications to be taken into account.

Individual specifications as to which colors are to be used particularly prevail in the automotive industry.

The colorists in the Color Competence Center hereby need the details of the spectral photometer (colorimeter) that is used as well as the measurement conditions. The most important parameters are: measuring orifice (size of the measurement spot), Specular Component Included (SCI) or Specular Component Excluded (SCE), the use of an UV filter, spherical measuring instrument, or 45/0° device. In addition, the spectral curve between 380 nm and 730 nm must be included in the data in steps of 10 nm. All of this information is contained in today's standard software packages for transfer files.

This can then be sent to the CCC in the following file formats: *.xml, *.csv, *.cstd, *.smnx (software Spectra Magic NX), or as an Excel file. Another detail for a good color result is a description of the surface of the finished part (color sample). It is important here to know the surface texture and gloss level, for example, as well as the type of plastic (amorphous or semi-crystalline). The opacity is also of fundamental importance: opaque, non-opaque, or translucent. If this information is available, another major prerequisite is that both parties use the same measuring instrument from the same manufacturer. Modern measuring instruments show a very good correlation when it comes to displaying colors.

The CCC has the following measuring instruments: Konica Minolta CM3600A (d/8°), CM700d (d/8°) manual device, CM2500c CT (45/0°).

The advantage of electronic data transmission is obvious: it is now possible to begin with a desired color setting much faster and provide a customized color concentrate or compound.

The qualified colorists in the ROWA GROUP are happy to help customers and explain the details of modern color development processes first-hand.

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ROWALACK <

Even faster and more flexible: Storage capacity and production improvements made.

The facts speak for themselves: with an increase in storage tank capacity from 135 m³ to 220 m³, an increase in the number of solvents stocked from 4 to 6, combined with newly integrated recipe controls and added automation in in the pigment preparation and color production, ROWA Lack continues to invest in the future.

While undertaking the works for improving the solvent storage facilities,

the opportunity was also taken to replace the existing piping systems. The new stainless steel pipework offers improved strength and durability and it is also a safer option. The newly completed conversion not only



The color production room for ROWALID[®] PP has also been refurbished and equipped with a new roller. One of the main advantages of the safer and more energy-efficient plant is that smaller batch sizes are now possible. This means ROWA Lack is able to offer more flexibility for the batch quantities and delivery times. Furthermore, the improved temperature control and dispersion with the new roller guarantees the

advances site safety, but also allows the solvents to be delivered to the production area faster thereby improving process efficiency.

consistently high quality standards that the industry has come to expect from ROWA Lack.

06 **ROWA** news

Innovative Tramaco product range expansion

Tramaco have developed the innovative TRACEL[®] IM 5260, a chemical foaming agent which is fit for use in polymers sensitive to hydrolysis like PC, PBT and others. This new foaming agent does not release any water or other hydrolytically active substances on decomposition.

Tramaco

TRACEL[®] IM 5260 has an endothermic decomposition mechanism and can even be used in products intended for food contact.

In the past, foaming of polymers sensitive to hydrolysis, like PC and PBT, could only be done with 5-Phenyltetrazole (5PT) which is the active substance used in the TRACEL[®] IM 2240 product range. All other commercially available foaming agents release hydrolytically active substances during decomposition and these substances accelerate polymer degradation during processing.

Initial customer trials with the new product TRACEL[®] IM 5260, especially in PC, have been very positive. Therefore the new foaming agent can be seen as an alternative to the standard products of the TRACEL[®] IM 2240 range. Slight modifications to processing parameters might be necessary to accommodate the new foaming agent, but Tramaco's technical service team will be glad to provide customised support for interested parties.

More information

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ROWA GROUP

Our goal: service at its best



Foto: COLOR COMPETENCE CENTER CCC+ of the ROWA GROUP

The portfolio of products from all of the companies in the ROWA GROUP is rather wide-ranging and comprehensive. This is why the group regularly brings together its sales representatives at sales conferences in Pinneberg to ensure the best possible after-sales service and support. foam injection molding with chemical foaming agents, and improved methods to measure adhesion, e.g. of coatings on plastic surfaces.

On behalf of ROWASOL, Hendrik Hesse presented detailed results of his research work on the topic of "Liquid colors in film applications" (see ROWAnews 1-17).

Outstanding: ROWASOL wins the ECCO Award



Gitsada Boonchirt, Vice Managing Director at the ECCO tannery in Thailand (left), presents Udo Wilkens, Managing Director ROWASOL, with the ECCO award

Some awards have very individual aims: they honor not just the past but are also, in fact, forwardlooking. At least this is what Udo Wilkens thinks. The managing director of ROWASOL has brought back an important certificate from a worldwide supplier symposium this year, the distinction for outstanding performances during the ECCO Code of Conduct audit. The award is embossed on beige leather from ECCO's own tannery, brilliantly colored and signed by ECCO executives.

The shoe manufacturer with its headquarters in Denmark and its main German office in Hamburg is, therefore now represented in Wilkens' office in Pinneberg too. The certificate is an eye-catcher and serves as an incentive at the same time, stresses the head of foreign projects. "In the ROWA GROUP, we see audits as an opportunity for improvement and the chance to make a pos-

itive impression on customers."

With kind permission of ECCO

This is why the chemical engineer went out of his way to accept the

leather certificate in April 2017 in Bangkok during the "Code of Conduct and Global Vendor Symposium". ECCO has its own works outside of the gates of Thailand's capital in the former royal city of Ayutthaya. Shoe soles made from thermoplastic polyurethane are injection-molded here as well as in four other locations in Asia and Europe – a procedure for which ECCO has relied on the know-how from

The last event focused on new developments and advisory services for individual solutions.

The first day of the conference concentrated on the broad range of technical plastics and blends from ROMIRA and the various potential applications of the latest developments. A lot of ideas came together in the conference room on how we can continue to satisfy the increasing individual demands of our customers. The ROMIRA vision played a key role here: namely of becoming THE partner for customer-specific solutions through speed, flexibility, and color competence.

Tramaco also offered extensive information on, among other things, applications for expandable microspheres,

Furthermore, the company organized live presentations of the development of individual product solutions and innovative technologies such as the ROWAMETRIC dosing system for ROWASOL liquid colors in the Color Competence Center. Live color settings, with ROWA Masterbatch resins too, can be carried out here directly with customers to achieve perfect results.

The new barbecue area adjacent to the ROWA Café was lit in bright sunshine to round off the sales conference. This enabled the exchange of ideas to continue after the presentations in a more relaxed atmosphere, thereby bringing the conference to a fitting close. Pinneberg since 2014: ROWASOL supplies the liquid concentrates used to color the TPU outer soles.

The thermoplastic polymer is very resistant to abrasion and has excellent shock-absorbing properties. It can also be produced in almost any color giving numerous design possibilities. After all, fashion has now reached soles and this is slowly moving color beyond the traditional black, gray and white: "We currently offer a portfolio with over 140 individually adjusted colors for ECCO," says Udo Wilkens. However, the managing director doesn't just want to show his colors when it comes to shoe soles, but also in the continued improvement in the cooperation overall – as a sound basis for future awards.



ROWA GROUP

The ROWA GROUP at trade fairs 2017/2018



FAKUMA Hall B1, Booth 1212 ROWA GROUP Friedrichshafen 17-21 October 2017



Plast Eurasia Hall 5, Booth 504A ROMIRA Istanbul 6-9 December 2017



Internationaler VDI-Conference "Plastics in Automotive Engineering" Booth 16 ROMIRA, ROWA Masterbatch Mannheim 14-15 March 2018



NPE Orlando ROWA USA / ROWA GROUP Orlando 7-11 May 2018



Automotive Interiors Expo Booth A7329 ROMIRA Stuttgart 5-7 Juni 2018

Why not take these opportunities to meet the ROWA GROUP at trade fairs this year and get the latest news on our products.

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Best performance - in sport too

Hamburg was fully in the hands of athletes over the Whit weekend: the cult club FC St. Pauli had organized the 18th Stadtpark triathlon on June 4, 2017 and a large number of ROWA GROUP employees once again lined up to compete. Three mixed relays and two individual starters from Pinneberg swam, cycled, and ran in the unseasonably poor weather that is typical of Hamburg. This year, Hannelore Bittner was able to repeat her sensational 1st place in her class and was duly acclaimed by her colleagues. The relay teams also excelled and reached the finishing line with some excellent times.

Around 970 participants rose to the challenge and completed 500m of swimming, 20km of cycling, and 5km of running. The ROWA GROUP demonstrated its dedicated team spirit and great motivation on this course in a very sportsmanlike way.



New automotive expert



Strategic alignment and support for local sales staff: In general, these are the tasks of the new Key Account Manager Automotive, Taner Kaplan (47). The qualified industrial engineer, who was born in Turkey and raised in Germany, has been supporting sales in the automotive sector of ROMIRA since the

beginning of May. From his office in Southern Germany, Kaplan is in constant contact with his colleagues in Pinneberg. Kaplan's appointment further strengthens ROMIRA's automotive team, which, under the guidance of automotive specialist Rainer Hoffmann, has driven this division of the ROWA GROUP forward for many years and with great success. Kaplan directly reports to the managing director of ROMIRA, Stig Lindström.

Kaplan brings more than 20 years of experience in the automotive industry, making him the ideal choice. His last job was as an independent advisor to various automotive suppliers. In addition to assuming the role of Key Account Manager Automotive, Kaplan will also be the first point of contact for all the customers

based in Turkey. Kaplan sees a lot of potential, especially in the Turkish market: "Our business in Turkey has to date been rather underdeveloped and, therefore, we will be targeting double-digit growth in this region in the coming years. I am also looking forward to the global challenge of working in the automotive sector with the colleagues in Pinneberg as well as those in other countries."



Graphic Design: Winneberger & Haacker Print: Print & More Piffrement

ROWA COM MASTERBATCH	Tramaco	ROMÍRA	ROWASOL	ROWALACK 💷	FRANCE	Nowa	KOREA	COATINGS
ROWA Masterbatch GmbH	Tramaco GmbH	Romira GmbH	Rowasol GmbH	ROWA Lack GmbH	ROWA France S.a.r.L	ROWA Inc.	ROWA Korea Co., Ltd.	Ningbo ROWA Coatings
Color, Additive and	Chemical Foaming	Technical Polymers	Liquid Color and	Special Lacquer	Distribution of ROWA	Production and distributi-	Production and	Technology Co., Ltd
Multifunctional Masterbatches	Agents, Additive Master- batches, Adhesion	and Blends Siemensstraße 1-3	Additive Compounds, Dosing Systems	Systems, lop Coats and Pigment Preparations	GROUP products in France	on of ROWA GROUP products in the USA	distribution of ROWA Lack products in Asia	Distribution of ROWA Lack products in China
Siemensstraße 1-3	Promoters, Primers	25421 Pinneberg	Siemensstraße 1-5	Siemensstraße 1-5	7, rue Albert Einstein	110 Phyllis Dr	511-16, Joogyo-Ri,	Rm.1218, Block A2, R&D Park,
25421 Pinneberg	Siemensstraße 1-5	Tel.: +49 4101 706 03	25421 Pinneberg	25421 Pinneberg	77420 Champs sur Marne	Croydon, PA 19021	Yesan Yeop Yesan Cup, Chungham Do	Lane 587, Juxian Rd,
Fax: +49 4101 706 202	Tel.: +49 4101 706 02	info@romira.de	Fax: +49 4101 706 400	Fax: +49 4101 706 234	Fax: +33 1 646 81 356	Tel.: +1 609 567 8600	Tel.: +82 41 335 42 03	Zheiiang Province, P.R.China
info@rowa-masterbatch.de	Fax: +49 4101 706 200	www.romira.de	info@rowasol.de	info@rowa-lack.de	info@rowa-france.com	sales@rowainc.net	Fax: +82 41 335 42 04	PC: 315048
www.rowa-masterbatch.de	info@tramaco.de		www.rowasol.de	www.rowa-lack.de			info@rowa-korea.com	Tel.: +86 574 87229282
	www.uamac0.0e							www.rowa-lack.de
	ROWA MASTERBATCH ROWA MASTERBATCH GmbH Color, Additive and Multifunctional Masterbatches Siemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 01 Fax: +49 4101 706 202 info@rowa-masterbatch.de www.rowa-masterbatch.de	EXEMPTIONEXEMPTIONBOWA Masterbatch GmbHTramaco GmbH Color, Additive and Multifunctional MasterbatchesChemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersSiemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 01 Fax: +49 4101 706 202 info@rowa-masterbatch.deSiemensstraße 1-5 25421 Pinneberg Tel.: +49 4101 706 02 Fax: +49 4101 706 200 info@tramaco.de	KOWEAGEFranceROWA Masterbatch GmbHTramaco GmbHColor, Additive and Multifunctional MasterbatchesTramaco GmbHMasterbatchesChemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersRomira GmbHSiemensstraße 1-3 25421 PinnebergChemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersTechnical Polymers and BlendsSiemensstraße 1-3 25421 PinnebergSiemensstraße 1-5 25421 PinnebergSiemensstraße 1-5 25421 PinnebergFax: +49 4101 706 02 info@rowa-masterbatch.de www.rowa-masterbatch.deSiemensatche Pax: +49 4101 706 200 info@tramaco.deSiemenstraße 1-3 25421 Pinneberg	KOWA Masterbatch GmbHTramaco GmbHKomira GmbHRowasol GmbHColor, Additive and Multifunctional MasterbatchesChemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersRomira GmbHRowasol GmbHSiemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 01 Fax: +49 4101 706 02 info@rowa-masterbatch.deChemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersTechnical Polymers and BlendsRowasol GmbHLiquid Color and Additive Compounds, 25421 Pinneberg Tel.: +49 4101 706 02 Fax: +49 4101 706 200 info@romira.deTechnical Polymers and BlendsSiemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 04 Fax: +49 4101 706 400 info@rowasol.de www.rowasol.de	 KOWA Masterbatch GmbH Color, Additive and Multifunctional Masterbatches Siemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 01 Fax: +49 4101 706 202 info@rowa-masterbatch.de Www.rowa-masterbatch.de Wittiganaco.de Www.romira.de Kowasol GmbH Liquid Color and Additive Compounds, Dasing Systems Siemensstraße 1-5 25421 Pinneberg Tel.: +49 4101 706 02 Fax: +49 4101 706 202 info@romaco.de Kiewensetbatch.de Ki	KOWA Masterbatch GmbH Color, Additive and Multifunctional MasterbatchesTamaco GmbH Chemical Foaming Agents, Additive Master- batches, Adhesion Promoters, PrimersFomira GmbH Technical Polymers and BlendsRowasol GmbH Liquid Color and Additive Compounds, Dising SystemsRowasol GmbH Special Lacquer Systems, Top Coats and Pigment PreparationsRowasol GmbH Special Lacquer Systems, Top Coats and Pigment PreparationsRowasol GmbH Special Lacquer Systems, Top Coats and Pigment PreparationsRowasol GmbH Special Lacquer Special Lacquer Special Lacquer Special Lacquer Special Lacquer Special Lacquer 	ROWA Masterbatch GmbH Color, Additive and Mattrunctional Masterbatch.de www.rowa-masterbatch.de www.rowa-masterbatch.deTramaco GmbH Chemical Foaming Agents, Additive Master- baches, Adhesion romoters, Primes E1: +49 4101 706 02 Fax: +49 4101 706 22 info@rowa-masterbatch.deTramaco GmbH Chemical Foaming Agents, Additive Master- baches, Adhesion Promoters, Primes Siemensstraße 1-5 25421 Pinneberg Te1.: +49 4101 706 02 Fax: +49 4101 706 22 info@rowa-masterbatch.deTramaco GmbH Chemical Foaming Agents, Additive Master- baches, Adhesion Promoters, Primes Siemensstraße 1-5 25421 Pinneberg Te1.: +49 4101 706 02 Fax: +49 4101 706 20 info@romira.deRowasol GmbH Liquid Color and Additive Compounds, Dising Systems Siemensstraße 1-5 25421 Pinneberg Te1.: +49 4101 706 03 Fax: +49 4101 706 02 Fax: +49 4101 706 20 info@romira.deRowasol GmbH Liquid Color and Additive Compounds, Dising Systems Siemensstraße 1-5 25421 Pinneberg Te1.: +49 4101 706 03 Fax: +49 4101 706 04 Fax: +49 4101 706 05 Fax: +49 4101 706 05 Fax: +49 4101 706 02 Fax: +49 4101 706 20 info@rowa-masterbatch.de www.romira.deRowasol GmbH Liquid Color and Additive Compounds, Dising Systems Siemensstraße 1-5 25421 Pinneberg Te1.: +49 4101 706 03 Fax: +49 4101 706 04 Fax: +49 4101 706 05 Fax: +49 4101 706 23 info@rowa-lack.de www.rowasol.deRowasol GmbH Liquid Color and Additive Compounds, Dising Systems Siemensstraße 1-5 Siemensstraße 1-5 Si	NOMENO

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