

ROWA news

NEWS FROM ROWA GROUP



Dear Business Associates,
Dear Ladies and Gentlemen,

We are satisfied with the preceding business year. By concentrating on our core competencies, we were able to start growth impulses and enhance our performance. The K-fair held last fall brought forth a number of new, promising projects and we are expecting a positive business result for the first quarter of 2017 despite volatile markets.

Because of current developments in the raw material market, topics like materials availability and rising raw material prices are increasingly coming in the limelight. Since each raw material has its own market drivers and special factors, supply and demand have played an important role during pricing discussions and this situation has presented an exceptional challenge.

The best insurance against global uncertainties is to have a strong innovation base in the group of companies. For this reason, the ROWA GROUP will continue to shape the topic of sustainability in 2017. Promoting product and color development as well as further intensive training, expanding the market presence and infrastructure and investing in energy efficiency more than ever are some of the important fields of action in this year, too.

Within the ROWA GROUP, the competencies for numerous products and plastics applications are all present under one roof. The enthusiasm for a common goal is the driving power for our actions and to make ideas become reality with and for competent business partners like you. For us, the closeness to our customers was, is, and will remain the decisive criteria for our actions. The exhibitions are always an important platform for communication and we will participate in a number of technical fairs in 2017. Details are given on page 8.

This issue of ROWAnews informs you about our new products and latest developments. At the center of the editorial concept are the economically viable application reports, on which we would certainly like to exchange views with you.

With best regards,
Yours Kai Müller

ROWALACK

Lacquer systems for furniture and decorative films



Furniture and decorative films ensure an artistic and color appeal. In many cases, hard or semi-hard films made from PVC or TPO are used in this field of application. Coating of these films with suitable lacquer systems enables the manufacturer to modify the surface with respect to different properties. The fundamental requirements for these products are manifold: high scratch and abrasion resistance as well as excellent chemical resistance. Along with this, there are the required visual and tactile properties ranging from deep-matt to high-gloss and from soft-touch right up to hard, very smooth surfaces. For 3D applications, the lacquer systems must additionally ensure an adequate amount of elasticity for subsequent processing methods.

Depending on the requirements, different, mostly solvent-based 2K systems are recommended from the product ranges of ROWAKRYL® and ROWADEKOR®. The lacquer systems are usually available both in gloss and matt finishes. For optimum cross-linking polyisocyanates are used as a standard, which enable

not only quick curing beside a sufficiently high pot life, but also provide a high level of nail marking and scratch resistance combined with excellent abrasion resistance.

Some ROWADEKOR® lacquers also conform to the furniture standard DIN 68861-1:2011-01, Part 1B and accordingly are optimized for chemical resistance. These innovations are also free of the solvents which are present in the SVHC candidates list. Consequently, these products represent the future generation of solvent-based coating systems.

The latest innovation in the area of ROWADEKOR® is a special UV stabilization. Products equipped with this feature are, for instance, ideally suited for decorative films which are used on window sills.

More information

www.rowa-lack.de
Dr. Dennis Stoltenberg · Tel.: +49 4101 706 189
d.stoltenberg@rowa-lack.de

Product designation	Solids [%]	Solvents	SVHC free	Recommended applications / Properties
ROWAKRYL® G-34360	25.5	MEK, PMA, Anon	x	PVC furniture film, 3D / high-gloss, suitable for deep drawing
ROWAKRYL® M-34615	28.5	MEK, PMA, Anon	x	PVC furniture film, 3D / matt, suitable for deep drawing
ROWADEKOR® G-114709	38.0	MEK, PMA	x	PVC furniture film, 2D / high-gloss, scratch-resistant, UV protection
ROWADEKOR® G-114711	23.0	MEK, PMA	x	PVC furniture film, 2D / high-gloss, flexible
ROWADEKOR® M-114791	36.0	MEK, PMA	x	PVC furniture film, 2D / matt, scratch-resistant, UV protection

Content

ROWA LACK	
Lacquer systems for furniture and decorative films	1
NEW: Extended range of pigments: ROWALID® ACN-F	2
Exhibition highlights for ROWA Lack and TRAMACO	2
TRAMACO	
Targeted development of new primers	3
ROMIRA	
Clear matter	4

ROMIRA is present all around the North Sea	4
Competence in numerous areas	4
ROWASOL	
Recipe optimization by means of film inspection	5
ROWA MASTERBATCH	
Hope for green	6
Anything but colorblind	6
Ensure high quality of drinking water	7

ROWA GROUP	
Eyes open: Experience live the world of colors	3
Otoplastics: Experiences with the new hearing protection	7
Successful appearance in K 2016 –	
exciting prospects for the year 2017	8
DIN EN ISO 50001: Standard is taking shape	8
The ROWA GROUP at trade fairs 2017	8

NEW: Extended range of pigments: ROWALID® ACN-F



To make this portfolio perfect for the requirements of the market in future, too, the company has extended its offer by a multitude of coloring agents. The focus of the development was on the elaboration of the grades, which help to achieve a balance between the desired functionality (resistance to light and weather) and the color target.

ROWA Lack has been completely successful in this with the new ROWALID® PMMA preparations. The company offers a standard range of color shades in ROWALID® PMMA, which convinces through its excellent properties. With the help of new developments, ROWA Lack now shows numerous design possibilities. Thus, only a minimum use of energy is

necessary in the thermoplastic area for a maximum coloring. Along with this, the required color intensities and transparencies can be achieved with low effort.

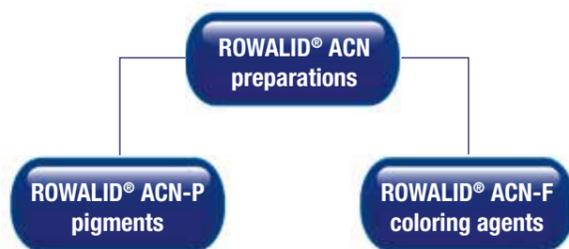
Interested customers can get more information about the product range in a personal meeting – also at the ECS in Nuremberg, Booth No. 1-609, and at the Techtexil in Frankfurt, Booth No. 3.0 F53.

More information

www.rowa-lack.de
Jörk Krumwiede · Tel.: +49 4101 706 124
j.krumwiede@rowa-lack.de

The ROWALID® pigment preparations of ROWA Lack GmbH are not only a fixed product in the market, but are also characterized by an always growing demand. To develop the business further and to optimize the portfolio, the company has developed an extensive range of pigments of PMMA preparations.

Even now, ROWA Lack is offering an excellent range of highly concentrated single pigment preparations with the frame structure PMMA (polymethylmethacrylate), whose focus lies in the area of the organic pigments.



Grade	PC	CI	Description
ROWALID® PPY 4017 ACN	40 %	S.Y.93	Greenish yellow
ROWALID® PPY 4841 ACN-F	60 %	D.Y.54 / S.Y. 114	Neutral yellow
ROWALID® PPY 4842 ACN-F	60 %	D.O.	Reddish yellow
ROWALID® PPO 4845 ACN-F	60 %	S.O. 60	Yellowish orange
ROWALID® PPO 517 ACN	40 %	D.O. 47 / S.O. 107	Reddish orange
ROWALID® PPR 4843 ACN-F	60 %	S.R. 135	Yellowish red
ROWALID® PPR 2072 ACN	70 %	S.R. 111	Yellowish red
ROWALID® PPR 2046 ACN	70 %	S.R. 195	Bluish red
ROWALID® PPR 4353 ACN-F	60 %	S.V. 59 / D.V. 26	Reddish violet
ROWALID® PPR 4856 ACN-F	60 %	S.R. 52	Magenta
ROWALID® PPB 4852 ACN-F	60 %	S.V. 13	Bluish violet
ROWALID® PPB 4854 ACN-F	60 %	S.B. 104	Neutral blue
ROWALID® PPB 4847 ACN-F	60 %	S.B. 97	Reddish blue
ROWALID® PPG 4844 ACN-F	60 %	S.G. 65	Yellowish green
ROWALID® PPG 4846 ACN-F	60 %	S.G. 3	Bluish green
ROWALID® PPN 4857 ACN-F	60 %	Br. 53	Brown
ROWALID® PPK 4855 ACN-F	60 %	Sw. 27	Black

Exhibition highlights for ROWA Lack and TRAMACO

The trade fair year 2017 is already in full swing – one additional highlight this year is the European Coatings Show (ECS). This is the world's biggest trade fair for colors and lacquers as well as for adhesives and sealants. Experts from ROWA Lack and TRAMACO will be taking part. From April 4 to 6, 2017, all visitors to the fair in Nuremberg are invited to get to know the extensive range of products at the Booth 609 in Hall 1. The employees of ROWA Lack and TRAMACO are happy to provide consultation to interested parties.

Leading trade fair for technical textiles

Along with ECS, the Techtexil in Frankfurt is another noteworthy entry on the 2017 calendar. This is the leading trade fair for technical textiles and non-woven fabrics and ROWA can be found in Hall 3 at Booth F53, from May 9 to 12. ROWA Lack will present not only the latest innovative product developments, but also advise visitors on individual and project-

related solutions. In addition to this, the experts of TRAMACO are present to round off the extensive lacquer portfolio with their primers and chemical foaming agents.

Powerful primers by TRAMACO

With the brands TRAPUR® and TRAPYLEN®, TRAMACO presents in both the trade fairs its efficient primers and adhesion promoters for plastic surfaces that are difficult to paint. They can be used in solvent based, aqueous or UV curable products. For painting plastics, TRAPYLEN® based on chemically modified polyolefins is one of the most frequently used products in the industry. The portfolio includes CPOs (chlorinated polyolefins) and APOs (acrylate-modified polyolefins). In this way, TRAMACO makes available a variety of matching products for almost every desired application.

Well protected with ROWA Lack

In the fairs, ROWA Lack presents its high-quality, water- and solvent-borne lacquers based on acrylates, PVC, polyurethanes and fluoropolymers. These lacquers are used in the segments of PVC tarpaulins, textile constructions, print media, automotive interiors, furniture and decorative films as well as synthetic leather. Added to this are innovative new developments with superior protective abilities against external influences, such as UV radiation. The pigment preparations division will also be on-site.



techtexil



Targeted development of new primers

It is a great challenge for the development of new primers to obtain outstanding adhesion results to various plastics.

The material polypropylene shows different end results even when using the same primer. It depends on the previous processing of the PP and, for example, whether it is a syndiotactic or atactic PP.

To evaluate the suitable primer, it is usually applied on the plastic and is then coated by a varnish or another finish. This specimen generally undergoes the cross-cut-test.

In this test, the coating is scratched through to the substrate with a cutter knife. The optimum process



With the cross-cut-test (left) and the appliance LumiFrac the adhesion results can be measured fastly.

should result in 10 squares 1 x 1 mm in size. The adhesion then is verified with an adhesive tape.

This is a fast test but it only provides information on sufficient or insufficient adhesion. In general, the primers of the TRAPYLEN® / TRAPUR® product ranges pass this test. But a detailed distinction as to the particular adhesion strength is not available.

The adhesion strength in the foil application segment can be determined by the tension/peeling test. Unfortunately, the usage of this method is limited for molded parts.

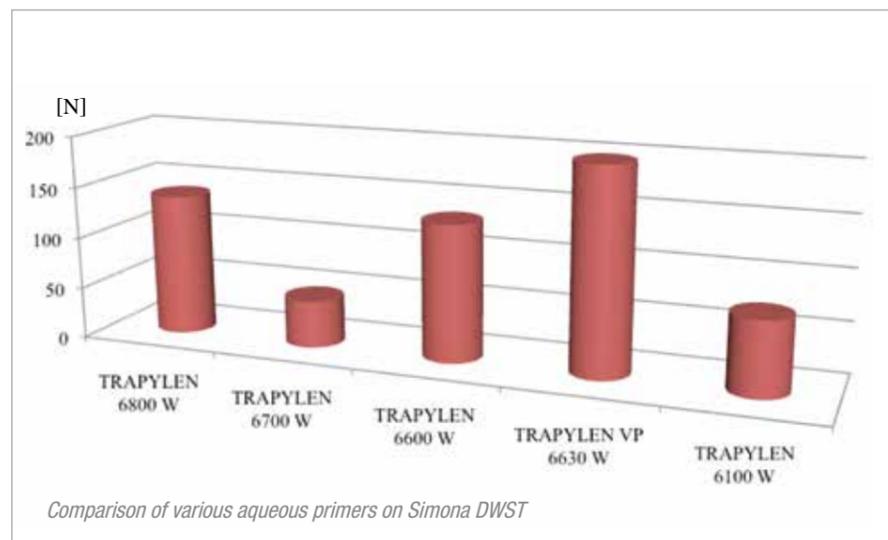
Further on the values determined vary consider-

ably because of, for example, modified tension forces caused by tilting.

Since 2011 the company LUM GmbH offers an appliance (LumiFrac), which significantly facilitates the testing of adhesion power and produces repeatable results. TRAMACO GmbH has been using this appliance since 2016 for the development of new products. The principle is easy to explain and easy to apply.

A defined stamp is bonded with a plastic molded part or a foil which previously had been coated with a primer. This specimen is put into a measurement cell in a centrifuge. The centrifuge rotates as long as the stamp peels off from the surface due to the centrifugal forces caused by the rotations. This testing results in an adhesion strength which is measured in Newton. Up to eight measurements can be carried out at the same time. Another advantage is the process time of a few minutes.

Actually TRAMACO offers its customers the possibility to measure substrates which had been coated with TRAPYLEN® / TRAPUR® to find the ideal primer for the customer's application.



More information

www.tramaco.de
Thorsten Halberstadt · Tel.: +49 4101 130
t.halberstadt@tramaco.de

ROWA GROUP

Eyes open: Experience the world of colors live



The companies of the ROWA GROUP are committed to offering unrivalled competence in color development and fulfill almost every wish in almost every shade. Whether they are in the colored plastics of ROMIRA, the masterbatch granules of ROWA Masterbatch, liquid colors of ROWASOL or the pigment preparations of ROWA Lack, ROWA GROUP can create the right color for you.

Color development now has a home of its own, which clients can experience and test for themselves in the new Color Competence Center (CCC). After its completion, all customers are cordially invited to experience the world of colors in a truly inspiring atmosphere with the full support of our team of experienced colorists.

In this new modern showroom, visitors have numerous possibilities of displaying colors in plastics. Backlit sliding panels carefully display the selected sample plates, which give a good representation of various end use possibilities. Different surface structures and colors ideally demonstrate the color know-how of the entire ROWA GROUP.

Still, the CCC is more than just a beautiful showroom – it invites guests to test and do it by themselves. Together with designers and product developers, customers can create their own color compositions and combine them with different surface finishes. Different types of lights can be used to illustrate the difference of color perception and simulate, for example, daylight or even neon light. In this way, the customers can identify, select and create the most suitable color shade for their application.

A standardized cabin is available for final assessment, which enables a full visual inspection of the color. Additionally, the self-created colors can be measured with the most modern color measurement systems under different conditions, light types and viewing angles enabling color values to be obtained and defined.

The ROWA GROUP cordially invites any interested clients to make an appointment to go on a tour of the world of colors and get inspired in the CCC.

More information

www.rowa-group.com
Julia Paul · Tel.: +49 4101 706 347
j.paul@romira.de



Clear matter



© Dulce Rubia/shutterstock.com

What actually differentiates Aldi from Audi? Certainly more than just one letter. The same is the case with the thermoplasts SMMA and PMMA. At first hand, ROMIRA, your reliable partner in the plastics processing industry, can evaluate the differences. After all, the company is now offering the transparent product, not known till now, Rotec SMMA (styrene-methyl-methacrylate). It is so brilliant, stable and as clear as glass like poly-methyl-methacrylate (PMMA). With one decisive difference: SMMA can be processed much better, since it has a lower residual stress in injection molded parts and hence a much better flow.



© DK samco/shutterstock.com

lenses as well as pharmaceutical, cosmetic and household articles. Even food items can be packed without any worry with this new development, because SMMA is free of bisphenol and is compatible with food items, as certified by the strict FDA (Food and Drug Administration) in USA. On the whole, the United States has stricter requirements for plastics and products that contain styrene-acrylnitrile copolymer (SAN) are no longer permitted there.

This has consequences for energy and water consumption during production: while maintaining high quality even the complex design parts are produced more economically than would be possible with acrylic glass. At the same time, the excellent surface texture remains intact: Rotec SMMA is much lighter than glass and also transparent, scratch and dishwasher-proof and resistant to a large number of chemicals or UV rays. In other words, the material yellows less.

But luckily, there is an alternative: Rotec SMMA enables the elegant packing of the salad as also the perfectly shaped viewing glass at the washing drum – the development of products, applications and system solutions, which are based on the molding ability of the compound, is still going on. Depending upon the requirement of the customer, the color also plays a role: In the building blocks system of ROMIRA, each plastic can be colored properly, synergies are used and a matching solution is worked out. In doing so, the employees are happy to provide consultation.

A wide range of desired product features, a lot of usage possibilities: Typical applications are products for medical technology like valves, flaps or optical

[More information](#)

www.romira.de
Dr. Milena Pöhlmann · Tel.: +49 4101 706 376
m.poehlmann@romira.de

ROMIRA is present all around the North Sea

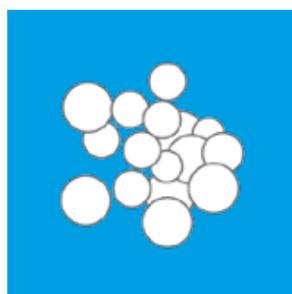


Chris Priest joined ROMIRA on November 7, 2016 as "Business Development Manager UK, Ireland & Nordic". The 43 year old has almost twenty years of plastics industry experience, and was enthusiastic upon

his appointment: "This opportunity will present many new and exciting challenges," said the manager, who is located in Mansfield in the county of Nottinghamshire.

The Briton has bachelor's degrees in Materials Science and in Business Management. It is exactly this mix of technology and business, with which the company wants to reinforce its commitment to these market areas by giving solid local representation and building stronger customer relationships. "Chris Priest is available directly to customers to support them with any aspects of business development," says the managing director of ROMIRA Stig Lindström, to whom the new employee will report. Priest is also in close contact with other colleagues from Pinneberg in application technology as well as in research & development. "We have a common objective: to drive forward the business and promote the innovative development materials the company has to offer."

Competence in numerous areas



ROMIRA is expanding its know-how in the field of consumer and industrial goods: In order to establish new products and product groups, the company has strengthened its development team with several employees. The plan also contains the extension of several existing applications so that ROMIRA can offer its customers an even wider portfolio in this area. There are signs of growth in the service and sales teams, too.

This expansion of ROMIRA focuses on industries with a promising future. Customers from the fields of Electrical & Electronics as well as household goods and articles of daily use expect better offers, for instance, for finer switches and high-quality housings of kitchen appliances. Along with this, there are new

products for gardening and agriculture as well as for the construction sector, where ROMIRA has excelled with the customer Vinylit together with the other companies of the group (see ROWAnews 2-16). An additional important branch is medical and laboratory technology, where ROMIRA will supply a lot of additional innovations in future.

[More information](#)

www.romira.de
Stig Lindström · Tel.: +49 4101 706 344
s.lindstroem@romira.de

Recipe optimization by means of film inspection

As already reported in the previous issue of ROWAnews, ROWASOL is working intensively on the optimization of liquid colors in film applications. Hendrik Hesse has analyzed this topic scientifically in his master's thesis and can now submit substantiated results.

Films made from the plastics ABS, PS/HiPS, LDPE, PET, PLA and PP were used for the tests. These were extruded as flat films on the single-screw laboratory extruder of ROWA Masterbatch. The extruder has a 30D mixing screw (D=30 mm) with barrier and hedgehog mixing elements and a subsequent flat die with hanger manifold. Following extrusion, the films were inspected for defects with an optical inline inspection system.

The specialty of the camera system of the R.A.M. GmbH is a system resolution of 5 µm/px, which can detect defects starting from a diameter of around 11 µm. This enables an optimum analysis of the dispersion quality of a colorant – outside of the perception of the human eye.

In order to be able to draw inferences about the effect of the liquid carrier medium on the properties of the end product, the extruded films were subsequently subject to a tensile test, a migration test as well as a DSC test.

Also the possible use and the limits concerning the processing were analyzed. Therefore each plastic type was extruded with three liquid colors each with 15 weight percent of an organic pigment based on different carrier systems. In doing so, the color dosage was continuously increased until a stable extrusion was no longer possible.

Especially conspicuous was the processing in PP, since here all carriers could be dosed with up to four percent, while much lower limits were set in case of the other plastics.

Owing to this share, an impairment of the mechanical properties would be expected here, but which is not confirmed by the results of the tensile test: A significant effect on yield stress and elongation as well as breaking stress could not be determined. Only the value of elongation at break was reduced by about 20 to 30 percent.



The camera system of the R.A.M. GmbH makes analyses of colorings possible, which are very precise.

Likewise low was the effect on the crystallinity, as shown by the DSC analyses. It is to be assumed that the liquid carrier gets stored in the amorphous areas of the polymer. Apparently this does not affect the crystallization behavior (see Figure 1).

The results of the analyses conducted till now convey the impression as if the selection of the carrier system were irrelevant in case of PP. However, a visual inspection shows grave differences, which can also be seen in Figure 2. The carrier system 3 proves to be especially suitable here, since a significantly low number of defects can be detected in the film.

The liquid colors of ROWASOL for film applications are sieved to 1 µm after dispersion and hence are free of agglomerates in the delivered condition. But during processing, the pigments in carrier 1 and 2 apparently agglomerate again. The used dispersion agents in these colors do not act in the desired way or are decomposed particularly so that the pigment surfaces are no longer wetted adequately.

Consequence: Individual particles come closer again and agglomerate to form larger complexes.

With the help of the high-resolution film inspection system, it has now become possible for ROWASOL to find a suitable formulation for each polymer-pigment combination to make an optimum dispersion. After completing his master's thesis, Hendrik Hesse will carry on doing research on this field and will start his professional career as application developer at the ROWA Group. With these investments, ROWASOL is best equipped in the personnel and analytical areas to overcome the challenges of the future – even for more and more sophisticated applications.

More information

www.rowasol.de
Udo Wilkens · Tel.: +49 4101 706 335
u.wilkens@rowasol.de

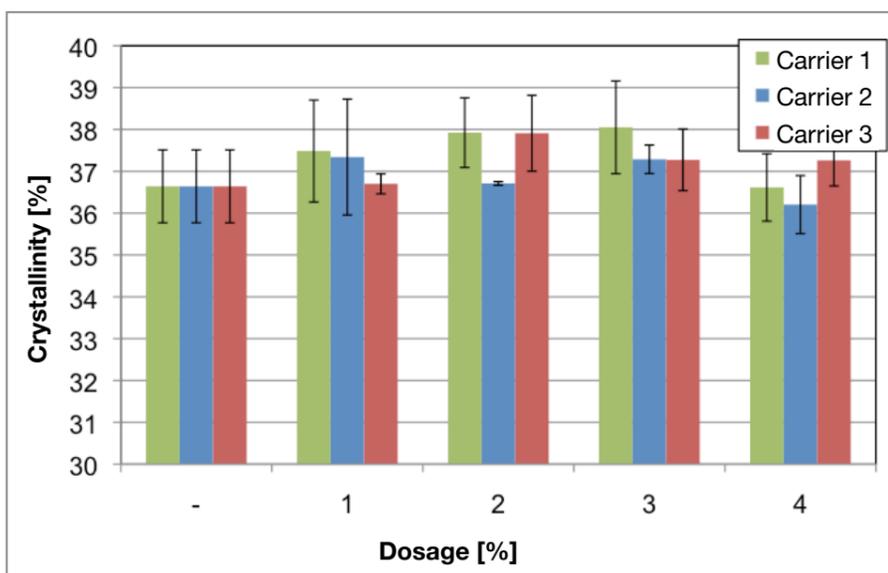


Figure 1: Effect of liquid colors with different carrier systems on the crystallinity of the PP films.

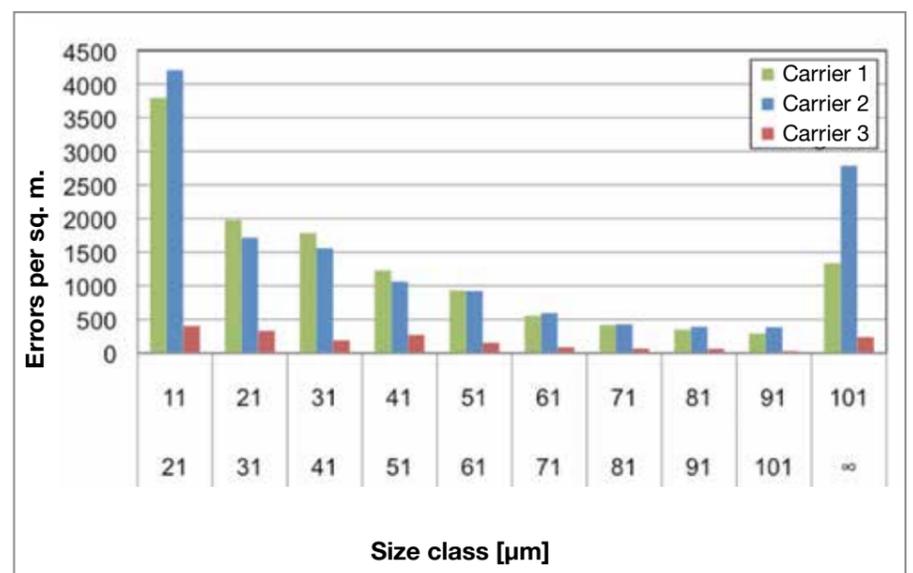


Figure 2: Effect of the carrier system on the number of defects in the PP film.

Hope for green



As green as tender peas, crunchy apples, ripe avocados – or the hope: The research institute Pantone has chosen “Green” as the color of the year, to be more exact the shade “15-0343 Greenery”. While searching for spirit of the time, trends and dominance of a specific tone, the color researchers of Pantone traveled all round the earth for almost one year, visited fashion shows, motor shows or design exhibitions and summarized what they found. This was refreshingly green: spring-like shades on the keyboard, fingernails or the breakfast plate.

Leatrice Eiseman, Managing Director of the Pantone Color Institute in Carlstadt, New Jersey, also finds it as a nice symbol for a new start and the still young year 2017: “Greenery reminds of young, fresh leaves and shoots and exhorts one to take a deep breath and fill with new energy.” To illustrate this, Pantone added color to a gray skyscraper in an image film: Young people are sitting on the roof terrace on artificial lawns and are relaxing with Matcha tea, at the notebook in soft-green design or taking care of plants.

It cannot be made out where exactly the film was shot. The banana trees indicate a tropical realm, but need not be so: “Just like the lawn or the spotless apples, these are mostly decorative articles that have been realistically colored,” says Carmen Sawallich, colorist with ROWA Masterbatch. The company specializes in mapping practically every color shade in thermoplastic plastics, completely according to individual wishes and color trends.

“Apart from this, it is important to combine the color masterbatches with other additives, in order to guarantee properties such as UV stabilization and anti-static properties in the end product,” says Sawallich. In order that the color and product properties are tuned to one another, the colorists must have an instinctive feeling and expert knowledge: As a result, tailor-made ROWALID® masterbatches are made available to the customer.

Of course, such recipes cannot be cooked at home. For this, ROWA Masterbatch has the matching inscription in “Greenery”, a crispy fresh peas-risotto.

More information

www.rowa-masterbatch.de
Bernhard Scheffold · Tel.: +49 4101 706 255
b.scheffold@rowa-masterbatch.de

Pea-herb-Risotto by honeyfarm.de

Ingredients for 4 persons

- 1 cup risotto rice
- 2 tablespoons oil
- 2 onions
- 3 cloves of garlic
- 7 fluid ounces white wine
- approx. 3 cups boullion
- 14 ounces peas (fresh or frozen)
- 1 bunch of parsley
- 2 culms rosemary
- 3 leaves sage
- 6–8 leaves mint
- 40 leaves basil
- salt
- cayenne pepper
- 3 fluid ounces cream
- 2 ounces grated Parmesan cheese



Concoction

1. Peel the onions and the garlic cloves and chop finely. Heat the oil in a saucepan or frying pan. Sauté onion and garlic in hot oil. Add the rice and lightly toast. With a little white wine deglaze and let the liquid boil while stirring. Repeat until the wine is consumed.
2. Give continuous stirring the boullion in portions in the pot and let it absorb the rice until the rice is almost cooked. In the meantime, wash the herbs, shake dry and chop finely.
3. Approx. 5-7 minutes before end of cooking the rice (in between taste the rice), add in the peas and herbs. You may even pour some boullion. Add while stirring cream and Parmesan cheese and flavour with salt and cayenne pepper.

Anything but colorblind

At the start of 2017, the long-awaited move was completed: ROWA Masterbatch's color measurement lab shifted to its new facilities.

The new rooms offer greater potential for development and finally enough space to optimize the coloring work processes. The company has installed new color and gloss measuring instruments in its color measurement lab and has integrated a walk-in color sampling room. By eliminating interference from natural daylight, the true color impression of the samples and patterns can be visually assessed based on different types of standard light sources.

An experienced team of colorists works out polymer specific color settings. “Customers often send a sample part for re-adjustment,” explains Dorit Krienke, the Quality Assurance Manager. “This, for example, can be a component which must compliment other components. A special requirement is that there should be no visible visual difference between the individual components.”



To begin with, the sample part is analyzed colormetrically. Subsequently, a distinction is made between two different measuring geometries: the directional geometry and the spherical geometry.

Directional geometry has greater affinity with the natural vision and is a better reflection of the visual impressions. However, this measurement technique is highly vulnerable to various surface structures, which can strongly influence the result. The measurement can also be affected by impurities or scratches.

Spherical geometry is oblivious to different surfaces. The measurement results are therefore significantly more accurate. However, visual impression can still be different: the human eye perceives the same color on different structures differently and therefore the measurement results can be at a variance from the natural impression.

“In order to make optimal use of the respective strengths, we combine both techniques in our investigations,”

states Krienke. “It is only by getting exact measurement results that we can create the color formulation such that it corresponds to the exact color requirements of the customer.”

The color measurement lab is based on “Colibri” by Konica Minolta, one of the leading color management systems, which allows efficient operation, both pertaining to measurement and formulation. The program had to be supplied in advance with numerous data, measurements and information on the colorants. It is possible to calculate a suitable formulation with just a few mouse clicks. This is then mixed in the pilot plant and extruded. In spite of all the technical assistance, human beings are still indispensable as the last authority for color assessment. Only experienced colorists with a trained eye are able to give the mechanically calculated formulations the final touches. Only then are they presented to the customer for sampling.

More information

www.rowa-masterbatch.de
Dorit Krienke · Tel.: +49 4101 706 125
d.krienke@rowa-masterbatch.de



Ensure high quality of drinking water

Drinking water – there is probably no other food item, which is checked more intensively! After all, it must be suitable unrestrictedly for consumption. In the German-speaking region, there are higher quality requirements for drinking water from the tap than for industrially packed bottled or mineral waters.

This is also reflected in the materials and items, with which the water comes in contact with on its way to the consumer, be it in components associated with toilet flushing, water meters and shower heads, or at mobile food and beverage stalls, baths, saunas and in the food processing industry.

The use of approved components and water pipe parts is checked regularly by the health officials. Where parts are found not permitted for drinking water use, there is the possibility of imposition of a monetary fine and an immediate cancellation of the operator's license.

In Europe, drinking water permits are given by accredited institutions, which conduct testing according to local legal requirements. In Germany, for instance, the KTW licensing regulations ("Kunststoffe im Trinkwasser", meaning plastics in drinking water) of the DVGW (Deutscher Verein des Gas- und Wasserfachs e.V.) are relevant, in France, the ACS (Attestation de conformité sanitaire) is responsible, and in United Kingdom the WRAS (Water Regulations Advisory Scheme) is in place.



© Christine Nubel/shutterstock.com

The license is given for finished products only after compliance is demonstrated. According to the Guideline for Hygienic Assessment of Organic Materials in Contact with Drinking Water by the Federal Environment Agency (in short: KTW Guideline), only those substances may be used, which are listed in the positive lists of the EU directive 10/2011 ("on plastic materials and articles intended to come into contact with food") or in the BfR recommendations IX. ("Colorants for Plastics and other Polymers Used in Commodities"). Added to these are various standards, which must be followed. In laboratory

tests, it is then determined with cold, warm or hot water depending upon the application, whether the quality of the water changes. Therefore, the products may not affect the taste, the appearance or the smell. The desired license is granted only when these tests are passed.

In order to support its customers in doing this, ROWA Masterbatch uses only the raw materials for its products in this application area, which are present in the mentioned positive lists. The company also assists the responsible accreditation institutions and test laboratories by disclosing formulations where necessary. A modern product management system ensures that there are no changes in the composition of recipes, so that additional tests and costs are avoided.

More information

www.rowa-masterbatch.de
Ulf Malcharczik · Tel.: +49 4101 706 154
u.malcharczik@rowa-masterbatch.de



© dedek/shutterstock.com

Otoplastics: Experiences with the new hearing protection



Noise not only disturbs, it can even be harmful to health. The production area, for instance, can be noisy due to the operation of numerous machines. Despite technical noise reduction measures, it is mandatory for employees of the ROWA GROUP to wear hearing protection.

Providing comfortable hearing protection can help enormously with its acceptance with the workforce. For this reason, the ROWA GROUP has tested differ-

ent designs of hearing protection with several of its employees since 2015. The favorite model was selected at the start of 2016.

Along with the classical models of hearing protection, the ROWA GROUP provides employees working in noisy areas with individually customized otoplastics (Greek otós = "ear" and plastein = "shape, design"). Today, within the Group around 100 employees are equipped with this product.

Safety Officer, Frank Posselt, working in the production of ROMIRA GmbH since 2011, who participated in the testing of various models of hearing protection, has been wearing his otoplastics already for one year now.

During the test phase itself, he felt the "soft" otoplastics to be more comfortable in the ear than the "harder" ones. Thanks to otoplastics there is never a need to remove the hearing protection whilst in the production area. Posselt comments that even in the noisy environment, the otoplastics suppress the noise of the machinery so well but yet he is still

able to converse with colleagues on work issues with the otoplastics in place. He adds: "The need to take off the hearing protection is likely to occur only when the ambient noise goes down, for instance, during breaks." This is also confirmed by his colleagues.

Because the ear canal can change, the performance and functionality of the otoplastics is constantly monitored through regular checks by the company doctor. If the otoplastics do not fit correctly, they can become uncomfortable to wear and no longer provide adequate protection against noise.

Because the shape adjusts individually to the ear, the otoplastics are seldom treated as foreign bodies. According to Posselt, the workers wear this hearing protection more consistently than any of the other classical models.

More information

www.rowa-group.com
Marco Lange · Tel.: +49 4101 706 888
lange@rowa-group.com



The ROWA GROUP at trade fairs 2017



**International VDI Congress
"Plastics in Automotive Engineering"**
Booth No. 16
ROMIRA, ROWA Masterbatch
Mannheim
29-30 March 2017



European Coatings Show 2017
Hall 1, Booth 609
TRAMACO, ROWA Lack
Nuremberg
04-06 April 2017



Techttextil
Hall 3, Level 0, Booth F53
ROWA Lack, TRAMACO
Frankfurt
09-12 May 2017



Automotive Interiors Expo
Booth No. A5208
ROMIRA
Stuttgart
20-22 June 2017



Interplas UK Birmingham
Hall 4, Booth J49
ROMIRA, ROWA Masterbatch,
ROWASOL
Birmingham
26-28 September 2017



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

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

IMPRINT

Published by: ROWA GROUP Holding GmbH
Siemensstraße 1-9 · 25421 Pinneberg/Germany
responsible according to the press law: Kai Müller

Edited by: Menyesch Public Relations GmbH

Graphic Design: Winneberger & Haacker

Print: Print & More Piffrement

Successful appearance in K 2016 – exciting prospects for the year 2017

Many visitors, excellent discussions and a lot of interesting new topics: The K-fair fulfilled all expectations of the ROWA GROUP in 2016. The booth, with its modern, comfortable design, together with the services of a barista, provided a pleasant and relaxed atmosphere in which to host our visitors and allow them to escape the stresses of the busy exhibition.

The product range and the commitment of the employees of the ROWA GROUP companies attracted

many visitors to the booth. Numerous known and new faces from all over the world were welcomed and given information about the innovations and services of the company.

With these positive results, the ROWA GROUP is now eagerly looking forward to the exhibitions in 2017 and is expecting to welcome many more visitors at the Fakuma show later in the year.



DIN EN ISO 50001: Standard is taking shape

Chemistry requires energy, at best with systems, efficiency and sustainably. The ROWA GROUP is convinced of this. The company has decided to integrate the energy management system DIN EN ISO 50001 with its existing management systems. This is creating a stir: In 2015, ROMIRA, ROWA Masterbatch and ROWA Lack all received the ISO 50001 certification. Now, the Holding and ROWASOL will also be certified as having effective energy management systems in place.

"We are on the right path, technologically as well as organizationally," says Marco Lange, Energy Management Officer at the ROWA GROUP Holding. The standard with the three zeros is meant to improve energy efficiency, use and consumption. "This safeguards not just competitive ability, it also acts as environmental and climate protection," says Lange. "We are operating in one of the most energy-intensive sectors. Therefore, it becomes our responsibility to handle the natural resources in a lasting way."

 ROWA Masterbatch GmbH <i>Color, Additive and Multifunctional Masterbatches</i> Siemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 01 Fax: +49 4101 706 202 info@rowa-masterbatch.de www.rowa-masterbatch.de	 Tramaco GmbH <i>Chemical Foaming Agents, Additive Masterbatches, Adhesion Promoters, Primers</i> Siemensstraße 1-5 25421 Pinneberg Tel.: +49 4101 706 02 Fax: +49 4101 706 200 info@tramaco.de www.tramaco.de	 Romira GmbH <i>Technical Polymers and Blends</i> Siemensstraße 1-3 25421 Pinneberg Tel.: +49 4101 706 03 Fax: +49 4101 706 300 info@romira.de www.romira.de	 Rowasol GmbH <i>Liquid Color and Additive Compounds, Dosing Systems</i> Siemensstraße 1-5 25421 Pinneberg Tel.: +49 4101 706 04 Fax: +49 4101 706 400 info@rowasol.de www.rowasol.de	 ROWA Lack GmbH <i>Special Lacquer Systems, Top Coats and Pigment Preparations</i> Siemensstraße 1-5 25421 Pinneberg Tel.: +49 4101 706 05 Fax: +49 4101 706 234 info@rowa-lack.de www.rowa-lack.de	 ROWA France S.a.r.l. <i>Distribution of ROWA GROUP products in France</i> 7, rue Albert Einstein 77420 Champs sur Marne Tel.: +33 1 646 81 616 Fax: +33 1 646 81 356 info@rowa-france.com	 ROWA Inc. <i>Production and distribution of ROWA GROUP products in the USA</i> 110 Phyllis Dr Croydon, PA 19021 USA Tel.: +1 609 567 8600 sales@rowainc.net	 ROWA Korea Co., Ltd. <i>Production and distribution of ROWA Lack products in Asia</i> 511-16, Joogyo-Ri, Yesan Yeop Yesan-Gun, Chungnam-Do Tel.: +82 41 335 42 03 Fax: +82 41 335 42 04 info@rowa-korea.com	 Ningbo ROWA Coatings Technology Co., Ltd <i>Distribution of ROWA Lack products in China</i> Rm.1218, Block A2, R&D Park, Lane 587, Juxian Rd, Hi-Tech Zone, Ningbo City Zhejiang Province, P.R.China PC: 315048 Tel.: +86 574 87229282 info@rowa-china.com www.rowa-lack.de
---	---	---	--	--	--	--	---	---