**NEWS FROM ROWA GROUP** 

**ISSUE 01/2021** 

www.rowa-group.com



CONTENT

ROMIRA > 02/03 High functionality and design freedom with ROMILOY® ASA/PA > 03 New drinking water approval KTW-BWGL valid from March 2021

> 04 Green, strong, and light polyamide compounds

ROWASOL > 04 Compact system for liquid color dosing in plastic injection molding: with ROWASOL and HNP Mikrosysteme

ROWA MASTERBATCH > 05 Expertise at the cutting edge: Coloring high-performance plastics > 05 Pantone Color of the year: The perfect combination

TRAMACO > 06 Also suitable for sensitive applications: TRACEL® endothermic foaming agents > 06 Development of new adhesive additives for solvent

based printing inks

**ROWA LACK** > 07 Low-e lacquers for tent constructions

**ROWA GROUP** > **08** Current information about the exhibition year 2021





















Kai Müller, CEO ROWA GROUP

Dear ladies and gentlemen, dear business partners,



You are not reading the traditional editorial from our Managing Director Kai Müller today, but rather congratulations to him on his 30th anniversary with the company!

"KM", as he is affectionately referred to in-house, started his career at ROMIRA 30 years ago, first managing the engineering plastics and blends segment in the sales department and as an authorized signatory, and then later taking over the management of the company.

So many successful and cooperative business relationships have developed over the past three decades - some of which have long since become friendships. The ROMIRA team also continuously grew and this is particularly due to Kai Müller as Managing Director, in addition to the great group of colleagues and the fantastic customers.

Kai Müller assumed the position of Managing Director of the ROWA GROUP in 2014, following the significant expansion and restructuring of the rest of the group of companies.

We the employees would like to say thank you for the past years, in which we have consistently worked together in a spirit of trust as well as having the opportunity to party on a number of occasions.

Likewise, the 30 year anniversary would have been a great cause for celebration, but this has unfortunately fallen victim to the current circumstances. Even so, we were able to treat our "KM" to a cake, some champagne, a few presents and many heartfelt congratulations.

We look forward to many more years together! We now wish you, dear readers, an interesting and informative time reading ROWAnews and sincerely hope to meet you again at the first in-person trade fairs in autumn.

Best regards, your ROWA GROUP team

#### IMPRINT

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# Additional areas of application for ROMILOY® ASA/PA

# HIGH FUNCTIONALITY AND DESIGN FREEDOM

A competent manufacturer of engineering thermoplastics, ROMIRA is renowned in the plastics industry and in particular in the automotive sector as a reliable partner for efficient and application-specific material solutions. The company offers materials with tailor-made properties depending on the customer's requirements, fulfilling not only the technical requirements of automotive standards but also the functional and design aspects.

A perfect and latest example of this is the ROMILOY® 3020 - ASA/PA blends series. OEMs and fabricators alike highly value these blends and apply them in a variety of ways, particularly where decorative parts with function are required, such as complex part geometry combined with high safety requirements: I-panel covers, pillar trim, speaker grilles, seatbelt outlet trims as well as seatbelt guides and child restraint parts are just a few automotive interior examples.

The air outlet trim in the dashboard is a new area of application in which the ROMILOY® ASA/PA blend has recently proved its worth. In addition to the sophisticated visual impression that is always required in interiors, it is of particular importance here that the material complies with the high requirements of heat deflection resistance and UV resistance, something that is ensured by the UV-resistant ASA component.

Alongside the excellent balance of technical properties, the good tribological properties are also significant: The crystalline polyamide component as well as the addition of suitable additives boost the good tribological properties of ROMILOY® ASA/PA blends even further, resulting in excellent sliding properties and a natural noise-damping effect. These greatly valued aspects in the automotive industry can be achieved particularly well with the ROMILOY® 3020/01-5 MG5 blend. As a result of the high performance coloring, ROMIRA is able to produce complex tones and paler shades with the color consistency that is required.

ROMIRA also further contributes to improving the injection molding process for fabricators: Originally, polyamide-containing compounds had a tendency to

form deposits depending on the sprue design, flow path conditions, grain and mold geometry or residual moisture in the material, so that the molds had to be cleaned regularly to prevent deterioration in quality.

This situation has already been resolved by ROMILOY® ASA/PA compounds and, following further technology optimization, the time window that allows parts to be produced by injection molding without cleaning has now also been extended.

The list of advantages of the ROMILOY® 3020 product series also includes excellent chemical resistance and a striking look and feel to textured surfaces without subsequent coating. The products are also permanently antistatic by nature, and the outstanding dynamic load-bearing capacity of ROMILOY® 3020/11 for parts with high safety requirements is particularly







**Edited by** 

Credits



3020/01	3020/01 A	3020/07	3020/11	3020/01-4 M10	3020/01-5 M05 3020/01-5 MG5	3020/01-4 M15
Standard	High degree of stiffness, good dimensional stability	High impact strength	Very high impact strength, very good dynamic load capacity	Good dimensional stability	Good dimensional stability, impact resistant, good tribological properties	Very good dimensional stability, high degree of heat deflection



Air outlet trim in the dashboard Land Rover Discovery made of ROMILOY® ASA/PA Blend, injection molder, Barkley, UK



#### More information

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# **NEW DRINKING WATER APPROVAL KTW-BWGL VALID FROM MARCH 2021**

A new evaluation criteria document for plastics and other organic materials in contact with drinking water (KTW-BWGL) will apply from 21 March 2021 in accordance with § 17 para. 3 of the German Drinking Water Ordinance (Trinkwasserverordnung (TrinkwV)).

In contrast to the UBA guidelines, where the test laboratory issued a test certificate after successful testing of the product, only test reports will be issued based on the UBA evaluation criteria document (Bewertungsgrundlagen (BWGL)). Certificates for the hygiene suitability of drinking water can be issued with the enactment of the BWGL according to the "UBA recommendation for attestation of conformity of product hygiene suitability for drinking water" (procedure for attestation of conformity according to the 1+ system).

### Extended transitional arrangement due to the **COVID-19** pandemic

Only a limited number of initial inspections and third party monitoring by the certification bodies were possible due to the restrictions to contain the COVID-19 pandemic. As a result, until March 21, 2023, for attestations of conformity according to the UBA Recommendation, certification bodies may

not taken by the certification body for evaluation. ment, as specified here). This allows test reports prepared in the context of issuing test certificates according to the subsequently withdrawn guidlines to still be used for the evaluation up until March 21, 2023. However, the test reports must have been prepared after March 21, 2013 (deadline of ten years before the

still use test reports for test specimens that were March 21, 2023 end date of the transitional arrange-



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#### **LURANYL® TW TYPES CERTIFIED ACCORDING TO**

LURANYL® KR 2402 TW 35061 LURANYL® KR 2403 G2 TW Natural LURANYL® KR 2403 G2 TW 26343 LURANYL® KR 2403 G4 TW Natural LURANYL® KR 2403 G4 TW 26343 LURANYL® KR 2403 G6 TW Natural LURANYL® KR 2403 G6 TW 26343 LURANYL® KR 2403 G4 W1298

KTW, W270, WRAS, ACS

KTW, W270 KTW, W270 KTW, W270

KTW, W270, WRAS, ACS

KTW, W270

NSF

KTW, W270, WRAS, ACS



### **CERTIFICATIONS**

Our partners for drinking water certifications are the Hygieneinstitut, the TZW and the KIWA.







# GREEN, STRONG, AND LIGHT POLYAMIDE COMPOUNDS

ROMIRA offers high strength and lightweight polyamide compounds reinforced by re-processed carbon fiber.

Polyamides are tough, with high tensile strength and elasticity, and possess extremely good abrasion resistance. Polyamide (PA) compounds cover a wide range of industrial applications and are used extensively in almost all key industries from automotive and consumer products to the electronics and medical/healthcare sectors. The market for PA compounds has grown significantly in recent years. The cost efficiency and lower weight of PA compounds is a major growth driver. These compounds feature in fast-expanding industries that require lighter materials with equal or superior properties to metals, while still maintaining quality.

As a reliable and renowned polymer solutions supplier, ROMIRA has recently developed new lightweight and high strength PA compounds based on re-processed



carbon fiber (rp-CF). The rp-CF is produced from residual cuttings/offcuts supplied by leading carbon fiber manufacturers. Consequently, as the fibers are virgin fibers with homogenous properties there is no property fluctuation due to mixed fiber types. This green and sustainable re-processing on prime level, results in

TA CA TO THE STATE OF THE STATE	PA6 rp-CF20	PA6 CF20 (typical)	PA6 GF20 (typical)					
Density (g/cm³)	1.22	1.22	1.27					
Tensile Modulus (MPa)	13700	13500	7000					
Tensile Strength (MPa)	175	170	150					
Flexural Modulus (MPa)	11700	12000	6500					
Flexural Strength (MPa)	235	240	230					
Charpy notched impact, 23 °C (KJ/m²)	7	7	9					
Charpy impact, 23 °C (KJ/m²)	60	55	73					

up to 90 % less CO<sub>2</sub> footprint compared to prime carbon fiber production.

The PA compounds produced using rp-CF also exhibit excellent mechanical properties. The table presents typical properties of PA6 rp-CF20 (20 % carbon fiber) compared to a commercially available PA6 CF20. This clearly shows that the measured mechanical properties are highly comparable.

As previously mentioned, light-weighting is one of the key areas of interest related to PA compounds. Glass fiber reinforced PAs are used extensively in the automotive industry on account of their low cost and favorable

mechanical properties, in particular in terms of impact strength. The table demonstrates that the new PA6 rp-CF20 also offers a standard property level, while achieving a greater reduction in weight than PA6 GF20. ■



#### **More information**

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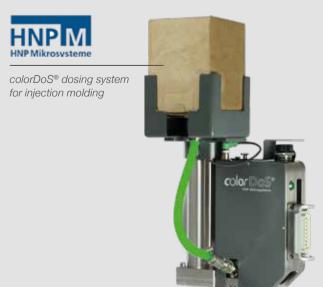


## Compact system for liquid color dosing in plastic injection molding

## TEAMWORK WITH ROWASOL AND HNP MIKROSYSTEME

One of the many advantages of using liquid color is homogeneous coloring even with small dosing quantities. However, if the component is very small, the delivery limit of conventional available metering systems may be undercut.

HNP Mikrosysteme, Schwerin, Germany, has recently launched the colorDoS® dosing system for injection molding applications to ensure precise dosing of the smallest quantities of color. The heart of this system is a micro annular gear pump, various versions of which have already been used successfully for fluid delivery in mechanical and plant engineering, in the chemical and pharmaceutical sectors, and in laboratory and analysis technology. The mzr-7245 modular micro annular gear



pump is used in the colorDoS®, which dispenses a shot weight of 0.02 g to 100 g of color per shot, depending on the dosing time and viscosity.

In addition to the option of small-volume dosing, the compact design enables another special feature: the dosing system is mounted above the injection molding machine directly in the feed area of the screw and can be easily integrated into existing machines. As a result, from HNP Mikrosysteme for interested processors. the colorDoS® is ideal for processors who have very limited production hall space and are unable to or prefer not to set up a separate dosing unit.

The resource-saving reusable system ROWASOL COLOR CUBE or disposable Politainer, which are placed on a holder above the pump module, are suitable as color containers.

Low empty volumes and short fluid connections between the container and the pump module, equipped with drip-free quick-connect couplings, ensure a fast and clean color change. A load cell integrated into the container holder monitors the liquid color level. The intuitive display control synchronizes precise, repeatable

dosing with the injection molding machine. The comprehensive functionality of the control system is further enhanced through a cleaning mode, recipe management, residual charge display, alarm manager, etc.

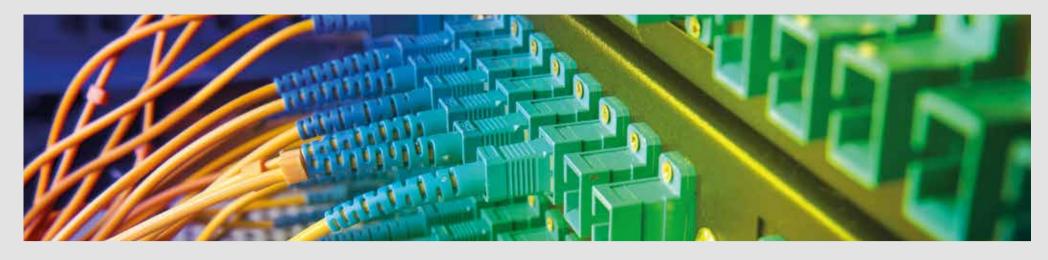
The ROWASOL team would be happy to hear from you with regards to color adjustments and can also arrange a joint operating test with a technical account manager











# Expertise at the cutting edge: COLORING HIGH-PERFORMANCE PLASTICS

ROWA Masterbatch's expertise as a developer and manufacturer of polymer specific color, additive and multifunctional masterbatches, as well as special compounds for thermoplastics, is once again demonstrated by its service for coloring high-performance plastics. Its premium quality program now includes an extensive portfolio of color masterbatches for high-performance thermoplastics.

Due to their excellent mechanical properties and higher resistance to chemicals and/or heat, highperformance plastics also meet more demanding requirements than standard and engineering plastics. Reflecting these positive characteristics, the range of applications for high-performance thermoplastics has increased significantly in recent years: Some examples of this are to be found in the field of battery electrics.

This is becoming more and more important as a result of the growing focus on electromobility, where there are particular demands for long-lasting products with high heat resistance. Digitalization, with its increasingly powerful electronic components, also requires highly sophisticated solutions.

A common feature of many of the applications is that the plastics used must, firstly, meet the requirements for high thermal load-bearing capacity and, secondly, provide a wide range of colors, particularly bright colors. The reason for this is that in many cases it is necessary to have a high degree of distinguishability, for example in the case of high-voltage cables and connection components in hybrid and electric cars, which are identified in orange. In addition, a color must retain precise safety-relevant characteristics even after a long period of use or continuously high operating temperatures; for example, key markings such as those on emergency switches must not be allowed to fade.

To achieve this, colorants with particularly high tem- Traffic purple, RAL 5015 Sky blue or RAL 6018 Yellow perature stability are required to ensure that the component retains its color and function even under thermal stress. To date, however, there has been very limited scope for adjusting colors for such components, as only inorganic colorants have been sufficiently temperature-stable.

#### TABLE ILLUSTRATING THE REQUIREMENTS:

green, tailor-made for high-temperature applications in proven "ROWALID® quality". The colorants selected are color-stable at processing temperatures up to 380 °C and exhibit very good coverage even with thin wall sections. At the same time, the resulting mechanical properties of glass-fiber-reinforced compounds are mostly retained.

Polymer/Compound	Short codes	High degree of heat deflection, HDT-A (1)	Processing temperature (injection molding)	Melting temperature
Polycarbonate	PC	127 °C	280 up to 320 °C	n.a.
Polycarbonate (high temperature resistant)	PC-HT	148 °C	320 up to 340 °C	n.a.
Polyphenylene sulfide	PPS-GF15	220 °C	330 up to 340 °C	280 °C (2)
Polyamide 6	PA6-GF30	210 °C	270 up to 295 °C	220 °C (3)
Polyamide 66	PA66-GF30	249 °C	280 up to 305 °C	260 °C (3)
Polyamide 46	PA46-GF30	290 °C	305 up to 320 °C	295 °C (2)
Polyphthalamide (PPA)	PA4T-GF30	317 °C	340 up to 370 °C	335 °C (2)

(1) ISO 75-2/A (1.8 MPa), (2) ISO 11357-3, (3) ISO 3146

The COLOR COMPETENCE CENTER at ROWA Masterbatch is able to develop the most optimal color masterbatches even for highly challenging tasks and also takes into account polymer-specific solutions for the particular component requirements of the customer. As a result, ROWA Masterbatch can also produce brilliant colors, such as RAL 1021 Colza yellow, RAL 2010 Signal orange, RAL 3000 Flame red, RAL 4006



#### **More information**

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Extraordinary times call for extraordinary measures. This saying is currently more apt than ever before. Familiar customs become a source of comfort; for example, the Pantone Color Institute's color of the year award, a choice that quite literally sets the tone. However, this year's choice is also some-what special, as the title is shared by two colors: "Together, the solid Ultimate Gray and the radiant Illuminating convey a positive message of inner strength. Practical and robust, yet also warming and optimistic - this is a color combination instilling hope and resilience", comment-

### **Pantone Color of the year**

# THE PERFECT COMBINATION: ROBUST AND FULL OF HOPE

The Pantone Color Institute 2021 color agenda is characterized by hope with the two colors of the year 17-5104 Ultimate Gray, which is a pale gray, and 13-0647 Illuminating, which is a vibrant yellow.

ed Leatrice Eiseman, Executive Director of the Pantone Color Institute.

The Pantone colors of the year consistently play a significant role in influencing product developments in many sectors, particularly industrial design, product design and packaging design, as well as the fashion industry. Over the coming months, solid, reassuring gray and a powerful, vibrant yellow will come to symbolize a hopeful light at the end of the tunnel in the design of many household products.

As always ROWA Masterbatch would be happy to provide support; color experts who specialize in polymer-specific and customized developments are ideally positioned to color plastic applications of all kinds in the current trend colors and of course in any other color you may require. ■





# Also suitable for sensitive applications: TRACEL® ENDOTHERMIC FOAMING AGENTS

Endothermic foaming agents have been part of TRAMACO's product range for more than 30 years. Previously, the focus was on classical applications such as the Celuka-process, injection molding and nucleation in physical foaming. However, the range of end-applications has expanded significantly in recent years.

Endothermic foaming agents are characterized by the consumption of (heat-) energy during decomposition. Consequently, the foaming behavior is less aggressive and slower than that of exothermic foaming agents. But in return the decomposition process can easily be controlled by the process temperature.

TRACEL® endothermic foaming agents are primarily based on carbonates and citric acid derivatives. The decomposition releases carbon dioxide and water as effective foaming gases. As a result, the endothermic TRACEL® products are physiologically harmless and generally also suitable for sensitive applications, such as items in contact with drinking water or foodstuffs, or food and pharmaceutical packaging.

As released water might affect performance in some

applications, TRAMACO's product range includes endothermic foaming agents with minimized water release, or which bind generated water to allow foaming of hydrolysis sensitive polymers.

Endothermic TRACEL® foaming agents are available as powder, paste or polymer-bound masterbatch.

Please contact TRAMACO's application engineers for individual customer service.





#### **More information**

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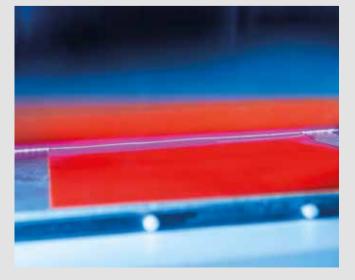
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# DEVELOPMENT OF NEW ADHESIVE ADDITIVES FOR SOLVENT BASED PRINTING INKS

The printing on polyolefin materials has always been a challenge. If separate methods for raising the surface tension such as flame treatment, corona or plasma treatment cannot be applied, it is necessary to add adhesive additives to the printing inks to obtain adequate adhesion with the polyolefin.

TRAMACO's portfolio offers highly efficient adhesion promoters, which are extensively used by the automotive industry for varnish applications. Xylol, the standard solvent for TRAPYLEN® adhesion promoters is among others used for solvent based varnish systems.

Solvent based printing inks generally are BTX-free and therefore difficult for many CPO applications. TRAPYLEN® 186 S has been the first CPO which shows a very good solubility in esters, like ethyl acetate, butyl acetate or ketones (e.g. MEK) because of its high chlo-



rine content of 43 % and the low molecular weight of approx. 15,000 g/mol. For this reason it still today is successfully marketed for printing inks.

It is an important development objective of new adhesion promoter systems to improve the adhesion for polyolefin materials. This may be reached by lowering the chlorine content of CPOs.

But a declining chlorine content causes continued reduction of solubility of a CPO in esters and ketones thus the development of new products for printing inks to the good compatibility. is a great challenge.

Another product of TRAMACO with good solubility in esters and ketones for printing ink applications is TRAPYLEN® 187 S with a chlorine content of 36 % and a molecular weight of approx. 30,000 g/mol. This product is especially qualified for unmodified PP because of a better adhesion as of TRAPYLEN® 186 S.

This is the very reason for the importance of the further development of CPOs with even lower chlorine content to realize better adhesion on difficult substrates. Products with higher molecular weight are of the same im portance to improve the resistance to chemicals - on the assumption that the solubility in esters and ketones will not deteriorate.

Other products with a chlorine content of approx. 30 % and a molecular weight of about 100,000 g/mol even show promising results.

TRAMACO's aqueous adhesion promoters are used for aqueous printing inks. These adhesive additives can be added directly to an aqueous printing ink due

Please contact the TRAMACO team for more information on diverse applications.





# **Save energy with ROWA Lack: LOW-E LACQUERS FOR TENT CONSTRUCTIONS**



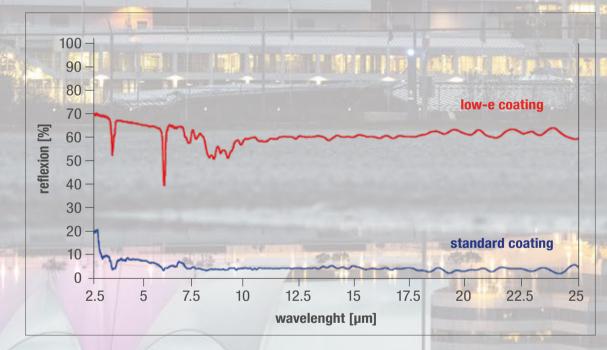
ROWA Lack is expanding its portfolio in the ROWALID® TIM range. In addition to silver and gold metallic effect lacquers the portfolio now also includes low-e (low emissivity) products for lacquering soft PVC-coated fabrics.

Sustainability is of utmost importance at ROWA Lack who demonstrate this not only through certification in the fields of environmental and energy management according to DIN EN ISO 14001:2015 and DIN EN ISO 50001:2011 and a silver medal Ecovadis CSR rating (Corporate Social Responsibility), but also through the recurring development of sustainable product solutions.

With ROWALID® TIM-95210 a solvent-based product with excellent low-e properties is now available to customers. Corresponding lacquering of PVC-coated fabrics gives a diffuse infrared reflexion of about 60% and an emissivity of less than 0.3. Current standard products have a reflexion of only 5 % and an emissivity of about 0.9. One example of use for this special ROWALID® TIM-95210 property is the thermal regulation of tent structures. If the low-e coating is applied to the outside of the

tent, heating by solar radiation will be reduced which will in turn reduce, as a consequence, the energy requirements for air conditioning. Alternatively, if the low-e coating is applied to the inside of the tent, less heat escapes from the tent to the outside thus reducing heating requirements. In addition to the above-mentioned properties, ROWALID® TIM-95210 has high flexibility and very good interlayer adhesion - important properties for the durability of the lacquered goods. The use of SVHC solvents was also completely dispensed with in the development of the new lacquer.

As always ROWA Lack also offers its customers tailored product solutions for special requirements. Our experts are always on hand to personally assist any interested parties.





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## **ROWA GROUP**





Following the virtually complete cancellation of events in 2020, the ROWA GROUP companies have confidently started planning their trade fairs for 2021. Once again, unfortunately, many events have been canceled or postponed to a later date this year. The ECS, for example, which was originally planned for March, has been moved to

late summer and is now expected to be held in mid-September 2021.

The PIAE in Mannheim, which was first postponed from March to June, has again been moved to a later date and will hopefully open its doors next September as the first attendance trade fair

since 2019. The ROWA GROUP is anticipating an exciting autumn of trade fairs including interplas, Fakuma and automotive Interiors Expo. We look forward to seeing you again soon!



TRACEL® / UNICELL / TRAPYLEN® / TRAPUR® TRACOMB / TRAFLAM / TRAPOR / TRASTAB / **TRASTATIC** 



ROWAKRYL® / ROWAFLON® / ROWATHAL® / ROWANYL® / ROWASIL/ROWADEKOR®/ROWASET/ROWALID® TI **ROWALID®** Pigment preparations

**≫ CURRENT «** 

developments





**SEPTEMBER 14. - 16. 2021,** NÜRNBERG, HALL 1, BOOTH 107

The ECS trade fair is considered an important platform for trends and techniques related to the production of colors, lacquers, sealants, construction chemical materials and adhesives. TRAMACO and ROWA Lack from the ROWA GROUP are looking forward to meet in person at their booth.



#### **JUNE 21. - 24. 2022, FRANKFURT**

According to the current situation, Techtextil, the leading international trade fair for technical textiles and nonwovens, will again bring together exhibitors and interested parties in Frankfurt summer next year. The new date is already firmly entered in the **TRAMACO** and **ROWA Lack** trade fair calendar.



ABS, ASA, AES, PC, SAN, PMMA, POM, SMMA, PA, PBT, M-ABS

**ROMILOY®** 

Blends based on PC, PA, PBT, PET PPE-blends (PPE+PS -I, PPE+PA) und Styrolcopolymeren

**LURANYL®** 

ROMITRON®

PPS-blends



#### SEPTEMBER 8. - 9. 2021, **MANNHEIM, BOOTH 18**

Being an important partner of the automotive industry, this worldwide largest convention for plastics in automotive construction is part of the ROMIRA's must-attend trade fair program.



### **SEPTEMBER 28. - 30. 2021, BIRMINGHAM, UK, HALL 4, BOOTH F81**

ROMIRA will present its portfolio of high-quality engineering plastics, blends and compounds to an international audience in the UK at the No. 1 plastics trade fair.



#### **NOVEMBER 9. - 11. 2021,** STUTTGART, BOOTH A4329

ROMIRA, a company that has been setting standards in the industry for years, will of course be present at THE trade fair for design teams and buyers for automotive interior applications.

# **INTOWAGROUP** HIGH PERFORMANCE ADDITIVES AND TECHNICAL PLASTICS



industry trends





### OCTOBER 12. - 16. 2021, FRIEDRICHSHAFEN, HALL B1, B00TH 1212

FAKUMA is the largest trade fair for the plastics industry in Europe, unfortuantely it was canceled last year but is now already firmly scheduled for October for the ROWA GROUP companies. This most important trade meeting of the year will finally take place again in Friedrichshafen!

**ROMIRA Technical Polymers** and Blends

**ROWA MASTERBATCH** Polymer Specific Color, Additive and Multifunctional Masterbatches **ROWASOL** 

Liquid Colors, Additive Concentrates and Dosing Systems **TRAMACO** 

Chemical Foaming Agents, Additive Masterbatches, Adhesion Promoters, Primers

**ROWA LACK** 

Special Lacquer Systems, Top Coats, Pigment Preparations

ROWA Masterbatch GmbH

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