AMONG COLOR EXPERTS:
NEW PRODUCTS
AT ROMIRA, ROWASOL
AND ROWA MASTERBATCH > PAGE 06/07

ROWA GROUP
> 02 Dieter Koch enters into retirement
> 02 ROWA GROUP puts new lightweight building into operation

ROMIRA
> 03 International industry meeting on the Bosporus
> 03 Performance and durability for healthcare applications

ROWASOL
> 04 Quiet driving experience
> 05 Polycarbonate – impact-modified and still translucent
> 06 LDX BY ROMIRA to avoid hot spots

ROWA MASTERBATCH
> 06 New cooperation in the pump sector

ROWA LACK
> 06 New water and solvent based lacquer systems for antistatic finishing

TRAMACO
> 08 REACH Committee rejects inclusion of ADCA into Annex XIV
> 08 Presentation of the Primaduta Award

ROWA GROUP
> 08 The ROWA GROUP at international trade fairs

ROWALID®-IR: DARK PLASTIC ARTICLES CAN NOW ALSO BE SORTED AND RECYCLED > Page 07

ROMIRA: VO approved!
MORE PERFORMANCE & DURABILITY FOR APPLICATIONS IN HEALTHCARE WITH ROMILOY® > Page 03
Dear business partners, madams and sirs,

after a confident start to 2020, the Corona pandemic has caused our forecasts and business activities to plummet, as it has for almost all companies. We have already overcome the challenge of reorganising our production facilities to include protective measures within the workplace that will reduce the risk of infection at work – preventing infections within our business environment is paramount. Whether and how quickly we will be able to continue at the originally projected production levels depends on a range of factors and cannot be forecast reliably at this stage. We are keeping a close eye on developments and continue to work with an optimistic outlook towards the future. This also applies to our sourcing that we had already put onto a broad base in order to, for example, prevent any shortages resulting from global crises. This keeps the risk for our customers as low as possible. All these changes are clearly showing what the VUCA* world is like. But once again, this also proves the value of the asset of the ROWA GROUP, namely its strategy to work as a strong community and to generate sustainable solutions through a variety of perspectives that we then use to support each other. This is the foundation for remaining at your side as a reliable partner!

These times are also illustrating the increasing speed with which requirements regarding digitalisation and sustainability are changing. It is becoming more and more important to develop recyclable products with our partners, to invest in technologies and to secure access to recyclable “waste flows”. With the black masterbatch that can be detected in the NR spectrum, meaning that the material can be sorted, ROWA Masterbatch facilitates recycling; and it also matches the trend of the color of the year with its attractive customised shades of blue. The medical industry is one of the new focuses for ROWA; the company developed high-impact compounds for the medical industry that are disinfectant-resistant.

You can find further information, outlooks and innovations on the ROWAnews pages below.

I wish you a pleasant browse through the articles and remain hopeful that I will be meeting you in person again in the near future!

*VUCA is the abbreviation for “volatility”, “uncertainty”, „complexity” and “ambiguity” and refers to the alleged characteristics of the modern world.

---

Mr. 100,000 Volt

DIETER KOCH ENTERS INTO RETIREMENT

It was October 15, 1979, when Dieter Koch, then 23 years old, started his career at ROWA GmbH in Seetetal in the district of Harburg near Hamburg.

Initially, the industrial electrician took over responsibility for the Lower Saxony site and over the years proved to be the ideal technical connection to Pinneberg. 2009 saw Dieter Koch become deputy head of operations technology for both production sites - a position he held par excellence until a short time ago. After more than 40 years, the ROWA GROUP bid farewell to its esteemed colleague who retired at the end of February: “An employee like Dieter Koch is a fortunate stroke of luck for any company - motivated, experienced, always helpful and always open to new things. He will leave a huge gap! We would like to thank him for 40 years of loyalty and wish him all the best for the future,” remarked Managing Director Kai Müller.

“We nevertheless, am now looking forward to my retirement, which will no doubt be a highly active retirement, as I have many ideas for this new phase of my life,” says Dieter Koch - internally also known as Mr. 100,000 Volt.

Optimization of storage capacity

ROWA GROUP PUTS NEW LIGHTWEIGHT BUILDING INTO OPERATION

TRAMACO moving their offices, including their independent warehouse, in 2017 / 18 to their new headquarters in Tornesch, has already resulted in first signs of logistical relief in Pinneberg. Due to a continuously increasing demand for storage space, in 2018 the ROWA GROUP initiated plans for a brand new building on the previously undeveloped property at Ziegeleiweg 40. The site has a total area of 2,900 sqm. By the end of 2018, the land had already been cleared, newly paved and was usable as open-air storage. A vast lightweight building was erected one year later, in November 2019, and in December it proved to be a highly successful inauguration and Christmas party venue. Since January of this year, it has been fulfilling its intended purpose. The lightweight building has a floor space of 1,350 sqm, providing the warehouse with considerably more free space.

Thanks to this additional capacity, the ROWA GROUP is now less dependent on the previously rented external storage space and, as a result of the close proximity, is much more flexible, since more raw materials are available on site.
INTERNATIONAL INDUSTRY MEETING ON THE BOSPORUS

The PlastEurasia in Istanbul has become somewhat of a fixture in the ROMIRA trade fair calendar. ROWA Lack also regards PlastEurasia in a positive light following its successful premiere at the trade fair.

From 4 to 7 December last year many of the major players in the plastics industry once again met at PlastEurasia 2019 in Istanbul for an opportunity to exchange ideas. Over the course of the trade fair organizers registered 1,085 companies from 40 countries and around 52,000 trade visitors from 106 countries.

The same diversity was also reflected at the ROMIRA booth, which was itself present as an exhibitor for the third time, but for the first time in cooperation with ROWA Lack. Many automotive suppliers and renowned OEMs took the opportunity to have personal consultations. The booth, featuring the usual modern design, was the location for establishing interesting new contacts and maturing existing associations across a range of industries. The focus was on issues such as pre-colored plastics (MIC – Mold in Color) for a matt surface or in high gloss without lacquering, chrome substitutes, compounds with good scratch resistance and high temperature resistance as well as light diffusion.

“Once again we can look back on the result of our participation at the trade fair very positively. PlastEurasia offers a prime opportunity to meet companies and representatives from the automotive industry and many other interesting fields – in particular from Turkey, its neighboring countries and the Middle East. We have seen a considerable increase in the recognition of our company in this our third year, which is a good reason to participate as an exhibitor once again at the end of 2020,” summed up Stig Lindström, Managing Director of ROMIRA GmbH.

V0 approved! EVEN MORE PERFORMANCE AND DURABILITY FOR HEALTHCARE APPLICATIONS WITH ROMILOY®

The demand for cleaning medical equipment with ever more aggressive disinfectants is growing. If selection of the cleaning materials are not right and optimal, the containing chemicals can induce problems such as stress cracking (ESC, environmental stress cracking), which can affect the strength of the end product.

ROMILOY® 5130/01 and 5140 are highly impact-resistant blends of polyester and polycarbonate (PC), which consistently and reliably meet the high demands of the healthcare industry for patient safety and apparatus durability. These blends combine the exceptional chemical resistance of polybutylene terephthalate (PBT) to resist more harsh disinfectants with the impact resistance and dimensional stability of PC to protect the portable equipment from shock and impact during transportation.

The wide processing window of these materials enables product designers to achieve greater design freedom, as they can produce large, high-quality and ergonomic molded parts without difficulty.

Resistance to common disinfectants and chemicals used by Electronics and Electronics has been evaluated according to test procedures in the ASTM D543 / ISO 175:2010 guidelines. The materials are also listed in white, natural and black as V0 up to a wall thickness of 0.75 mm and 5VA up to a wall thickness of 2.5 mm UL94. The Comparative Tracking Index (CTI) of 600 allows the materials to be used for current-carrying power components in very harsh environments.

The flame-retardant blends offer an economical alternative to conventionally coated materials. With the support of the Color Competence Center (CCC+), ROMIRA provides OEMs with products in a wide range of color spectrums they require, while reducing costs and the environmental effects of secondary coating. The inherent color prevents the problem of scratches in the lacquer and makes it easier to clean the parts.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Sodium hypochlorite solution 50%</th>
<th>Glutaraldehyde</th>
<th>Methyl ethyl ketone (MEK)</th>
<th>Organic ammonium chloride</th>
<th>Ethanol</th>
<th>Hydrogen peroxide solution 3%</th>
<th>Isopropanol 70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROMILOY® 5130/01</td>
<td>+</td>
<td>0/+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>ROMILOY® 5140</td>
<td>+</td>
<td>0/+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

More information
www.romira.de / Sven Guzelski
+49 4101 706 303 / s.guzelski@romira.de
QUIET DRIVING EXPERIENCE

ROMIRA has successfully developed innovative plastic compounds which, owing to their improved tribological properties, significantly reduce noise in car interiors.

Mobility is in a continuous state of transformation, in particular driving a car is constantly being further improved: Vehicles are increasingly environmentally friendly, more efficient and more and more comfortable for both driver and passengers - in recent years, for instance, the exterior noise audible inside the car has been drastically reduced. Cars are becoming quieter through new engine and tire technologies, and the interior is also better insulated.

These positive developments have, though, meant that sensitivity to noise has now shifted from outside to inside. Noise in the car interior is now more noticeable, above all the squeaking and rattling of parts moving relative to each other, of parts clipped together and plastic parts around the headliner and seat.

Engineering plastics such as ABS, PC/ABS, PC/ASA, PP, PVC and leather or unsuitable material pairings pose an increased risk of squeaking. The so-called stick-slip process, i.e. the alternation of sticking and slipping when friction occurs between two parts in a multidimensional movement, is responsible for these squeaking sounds. Consequently, the key to reducing the squeaking is to avoid the sticking.

Ziegler-Instruments stick-slip stand makes it possible to simulate the stick-slip effect between two material samples and to assess the potential risk of squeaking based on the Risk Priority Number (RPN). This is calculated on a scale from 1 for non-critical to 10 for critical.

While several methods can reduce squeaking, none of them have been satisfactory so far, partly because they cannot be applied to all surfaces or because they are very complex and thereby very costly. Thanks to the use of additives with a tribological effect, ROMIRA experts have succeeded in producing compounds that make squeaking a thing of the past – even without material properties changes, tool adjustments and additional work steps. ROMIRA's know-how lies in the compatibilization of the compounding process, so that the mechanical and thermal properties of the compound are maintained.

ROMILOY® compounds based on ABS as well as PC/ABS and PC/ASA with corresponding anti-squeak modification (Modiper A from NOF) demonstrate a significantly reduced risk of squeaking in the stick-slip test compared to standard compounds.

ROMIRA provides an economical and durable method for the „quiet“ car interior of the future with the anti-squeak modified ROMILOY compounds.

### ABS-COMPONENTS

**Risk of squeaking before and after thermal pretreatment with ABS compounds and influence of anti squeak modification**

<table>
<thead>
<tr>
<th>COMPOUND</th>
<th>COUNTER MATERIAL</th>
<th>RPN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>annealed (80°C/300h)</td>
</tr>
<tr>
<td></td>
<td>10N 40N 10N 40N</td>
<td>1mm/s 4mm/s 1mm/s 4mm/s</td>
</tr>
<tr>
<td><strong>ROTEC® ABS St</strong></td>
<td><strong>ROTEC® PA 66 GF 30°</strong></td>
<td><strong>2 1 2 1 3 2 5 4</strong></td>
</tr>
<tr>
<td>(standard)</td>
<td>PVC (synthetic leather)</td>
<td>4 2 3 3 6 5 9 6</td>
</tr>
<tr>
<td></td>
<td>Leather</td>
<td>5 4 10 9 10 9 9 9</td>
</tr>
<tr>
<td><strong>ROTEC® ABS AM</strong></td>
<td><strong>ROTEC® PA 66 GF 30°</strong></td>
<td><strong>2 1 2 1 2 1 2 2</strong></td>
</tr>
<tr>
<td>(anti squeak modified)</td>
<td>PVC (synthetic leather)</td>
<td>2 2 2 1 2 1 2 2</td>
</tr>
<tr>
<td></td>
<td>Leather</td>
<td>1 2 2 2 3 3 3 3</td>
</tr>
</tbody>
</table>

* smooth surface

### PC/ABS-COMPONENTS

**Risk of squeaking before and after thermal pretreatment with PC/ABS compounds and influence of anti squeak modification**

<table>
<thead>
<tr>
<th>COMPOUND</th>
<th>COUNTER MATERIAL</th>
<th>RPN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>annealed (80°C/300h)</td>
</tr>
<tr>
<td></td>
<td>10N 40N 10N 40N</td>
<td>1mm/s 4mm/s 1mm/s 4mm/s</td>
</tr>
<tr>
<td><strong>ROTEC® PC/ABS St</strong></td>
<td>PVC (synthetic leather)</td>
<td>4 2 5 3 4 3 6 3</td>
</tr>
<tr>
<td>(standard)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ROTEC® PC/ABS AM</strong></td>
<td>PVC (synthetic leather)</td>
<td>2 2 2 1 3 1 2 2</td>
</tr>
<tr>
<td>(anti squeak modified)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* smooth surface
Clear views thanks to a new development:
POLYCARBONATE – IMPACT-MODIFIED AND STILL TRANSLUCENT

Translucent plastics are used for many technical or decorative semi-finished products and finished parts. In this context, “translucency” refers to the optical property between transparent, such as glass or PMMA, and opaque, such as ABS or most crystalline plastics. One also speaks of a translucent product if it is translucent to the extent that a light source or lettering behind or underneath can be seen.

Pure, unmodified polycarbonate is one of the transparent materials, but is unsuitable for many applications due to its poor inherent impact strength at low temperatures. This brittleness can be reduced by suitable additives, but always at the expense of transparency or translucency.

The ROMIRA experts have now succeeded in impact-modifying polycarbonate with a new formulation and process development, while maintaining a high level of translucency. At the same time, the higher level of translucency allows for brilliant and deep color adjustment of the products.

The photo covers the difference in quality very clearly: sample plates produced with standard material on the left and right side of the picture. In the middle it presents a sample of the newly developed ROMILOY® showing clean, translucent lettering in red and black.

With a new stabilization package, ROMIRA also knows how to counteract the inherent yellowing tendency of polycarbonate. Another advantage, in addition to the good UV resistance, is the lower use of colorants.

<table>
<thead>
<tr>
<th>PROPERTY COMPARISON OF DIFFERENT ROMIRA PC BLENDS</th>
<th>ROMILOY® 1035 PC / ABS</th>
<th>ROMILOY® EXP2831 PC-Blend*</th>
<th>ROMILOY® EXP2964 PC-Blend*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Modulus, MPa</td>
<td>2350</td>
<td>2250</td>
<td>2300</td>
</tr>
<tr>
<td>Elongation at Break, %</td>
<td>&gt; 50</td>
<td>&gt; 50</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>Notched Impact Strength (Charpy), 23°C, kJ/m²</td>
<td>40</td>
<td>45</td>
<td>42</td>
</tr>
<tr>
<td>Notched Impact Strength (Charpy), -30°C, kJ/m²</td>
<td>30</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>Density, g/cm³</td>
<td>1,13</td>
<td>1,18</td>
<td>1,18</td>
</tr>
<tr>
<td>VICAT B50, °C</td>
<td>128</td>
<td>135</td>
<td>138</td>
</tr>
<tr>
<td>MFR (260°C/5kg), g/10 min</td>
<td>18</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Translucent, Plate 2 mm</td>
<td>55</td>
<td>60</td>
<td>72</td>
</tr>
</tbody>
</table>

* very good UV resistance

More information
www.romira.de / Dr. Milena Pöhlmann
+49 4101 786 376 / m.poehlmann@romira.de
Why do apparently so many people associate something positive with this color? Of course one could think that the favorite color is simply a question of individual taste. But perhaps there is more to it than that. Various scientific studies have shown, for example, that it makes people happier, more balanced and more vital when it comes to polymer-specific color, additive and combination masterbatches.

In fashion, product and industrial design - blue is used in all its facets and is a popular choice for consumers, as a glance into many kitchen cupboards, for example, shows, where pasta sieves, vegetable peelers or scissors in blue look are waiting to be used. Speaking of kitchens: Scientists around the world were researching for a natural blue food dye and found it in the superfood spirulina algae (phycocyanin). Highlights include blue whipped cream, blue ice cream or cake, and blue drinks, especially cocktails. The blue color is also popular in the production of sweets. A classic are blue jelly babies, which have not been produced so far and which can be produced healthy and vegan by this vegetable coloring!

The high-precision servomotor allows 0.1 to 80 ml of liquid color per shot to be dispensed. When changing between empty and full containers the piston volume is squeezed and is therefore not a wear part needing periodic replacement and creating waste that has to be disposed of. For quick color changes, a component group known as the piston set and comprising of two hoses and the piston is removed and stored for the next time they are used. Non-drip quick couplings ensure clean handling.

The color experts of ROWA Masterbatch are very familiar with the permanent trend of blue: the color is reflected in the company’s own logo since the foundation of the company! And as usual, they can of course produce the color of the year exactly with the ROWALID® classic blue: the manufacturer can color any plastic application individually and is therefore the ideal contact when it comes to polymer-specific color, additive and combination masterbatches.
Forewarned is forearmed:
NEW WATER AND SOLVENT BASED LACQUER SYSTEMS FOR ANTISTATIC FINISHING

To prevent electrostatic effects, plastics are usually prepared accordingly during the production process – but this is also possible at a later stage: ROWA Lack now offers a number of antistatic lacquers that meet a variety of customer requirements.

Electrostatic charge, primarily caused by friction between two objects, can lead to sudden electrical discharges as well as other, mostly unwelcome effects. Such discharges can have serious consequences, in particular in explosion-proof areas, and are consequently to be avoided at all costs.

On account of their high electrical resistance, plastics are particularly influenced by electrostatic effects. They are therefore often provided with an antistatic treatment during the production process. As an alternative, plastics can also be given an antistatic finish retrospectively - for example by means of a suitable coating.

There are various methods of providing antistatic properties to lacquer systems: Conductive carbon black, graphite, graphene, quaternary ammonium compounds, modified mica, singlewall and multiwall carbon nanotubes or conductive polymers can be used in the corresponding coating formulations. All of these raw materials have their own specific advantages and, more importantly, disadvantages. For instance, quaternary ammonium compounds wash out over time and the antistatic effect deteriorates. Conductive carbon blacks and graphite produce a deep black coloration of the lacquer, modified mica demands a high load, and conductive polymers are usually extremely expensive.

Unfortunately, due to the problems in sorting described so far, a significant proportion of plastics could not be recycled efficiently. With ROWALID®-IR, ROWA Masterbatch has now presented polymer-specific solutions for the dark and black coloring of plastics, which enable detection in the sorting process.

With this new development, ROWA Masterbatch makes a significant contribution to significantly increasing the recycling quota. As usual, the experts of ROWA Masterbatch are available for customer-specific requirements such as individual, dark color adjustments based on different plastics.

More information
www.rowa-masterbatch.de / Dr. Natalia Olichwer
+49 4101 706 154 / n.olichwer@rowa-masterbatch.de
REACH COMMITTEE REJECTS INCLUSION OF ADCA INTO ANNEX XIV

Following the renewed draft recommendation at the end of 2018 to include the chemical foaming agent Azodicarbonamide (AZO, ADC, ADCA) into Annex XIV (authorization list) under REACH, the REACH Committee at their July meeting did not accept this proposal.

In conclusion ADCA has not been included into the authorization process and may also in future be used for applications under REACH registration without temporal or other restrictions.

This decision of the REACH committee emphasizes the views of numerous experts that the authorization process is not the appropriate policy tool to regulate the handling of ADCA and that alternative risk management measures need to be considered.

On behalf of the Indonesian Ambassador, Mr. Arif Havas Oegroseno, Consul Emmanuel T. Ginting of the Consulate General of the Republic Indonesia and representatives of the Indonesian Trade Promotion Center Hamburg (ITPC) visited TRAMACO GmbH.

The Indonesian government presents the Primaduta Award to importers of Indonesian products to promote trade cooperation. On the occasion of the Trade Expo Indonesia in October 2019 in BSD City (Jakarta) TRAMACO had been selected in recognition of its long term business relationship with Indonesia.

“We are very pleased to receive this special award and look forward to continue the close cooperation with our Indonesian partners in future. We would like to thank the Indonesian Ministry of Trade and especially our partner Dongjin for the continuous, reliable delivery and the consistent excellent product quality”, says TRAMACO Managing Director Dr. Carsten Mennerich.

By the local production of UNICELL basic foaming agents since the early 1990s the delivery factory PT Dongjin has established itself as one of the most important raw material partners of TRAMACO.

TRAMACO GmbH, who is as one of the initiators of the ADCA Task Force taking an active role in the regulatory process concerning the ADCA, welcomes this decision.

In 2012 ADCA had been included into the candidate list as “Substance of Very High Concern” because of its existing classification as “respiratory sensitizer” and has since then to be labeled as “SHVC-Candidate Substance” if the content in a product exceeds 0.1%. When used properly, ADCA decomposes almost completely during the foaming process. However, it is recommended to the processor to verify the residual content in the foamed product.

Please contact the TRAMACO team for further information on the regulatory status or safe usage of ADCA or for information on other foaming agents which might be used alternatively for specific applications.

More information
www.tramaco.de / Dr. Carsten Mennerich
+49 4101 706 219 / c.mennerich@tramaco.de

PRESENTATION OF THE PRIMADUTA AWARD

On November 20, 2019 the Primaduta Award of the Indonesian government was presented to Tramaco GmbH in Tornesch.

On behalf of the Indonesian Ambassador, Mr. Arif Havas Oegroseno, Consul Emmanuel T. Ginting of the Consulate General of the Republic Indonesia and representatives of the Indonesian Trade Promotion Center Hamburg (ITPC) visited TRAMACO GmbH.

The Indonesian government presents the Primaduta Award to importers of Indonesian products to promote trade cooperation. On the occasion of the Trade Expo Indonesia in October 2019 in BSD City (Jakarta) TRAMACO had been selected in recognition of its long term business relationship with Indonesia.

“We are very pleased to receive this special award and look forward to continue the close cooperation with our Indonesian partners in future. We would like to thank the Indonesian Ministry of Trade and especially our partner Dongjin for the continuous, reliable delivery and the consistent excellent product quality”, says TRAMACO Managing Director Dr. Carsten Mennerich.

By the local production of UNICELL basic foaming agents since the early 1990s the delivery factory PT Dongjin has established itself as one of the most important raw material partners of TRAMACO.

TRAMACO GmbH, who is as one of the initiators of the ADCA Task Force taking an active role in the regulatory process concerning the ADCA, welcomes this decision.

In 2012 ADCA had been included into the candidate list as “Substance of Very High Concern” because of its existing classification as “respiratory sensitizer” and has since then to be labeled as “SHVC-Candidate Substance” if the content in a product exceeds 0.1%. When used properly, ADCA decomposes almost completely during the foaming process. However, it is recommended to the processor to verify the residual content in the foamed product.

Please contact the TRAMACO team for further information on the regulatory status or safe usage of ADCA or for information on other foaming agents which might be used alternatively for specific applications.

More information
www.tramaco.de / Dr. Carsten Mennerich
+49 4101 706 219 / c.mennerich@tramaco.de

TRADE FAIRS 2020 The ROWA GROUP at international trade fairs

ROWA MASTEBATCH

ROWA Masterbatch GmbH
Color, Additives and Multifunctional Masterbatches
Siemensstraße 1-3
25421 Pinneberg
Phone: +49 4101 706 01
Fax: +49 4101 706 202
info@rowa-masterbatch.de
www.rowa-masterbatch.de

TRAMACO GmbH
Chemical Foaming Agents, Additive Masterbatches, Adhesion Promoters, Primers, Latex Foaming Agent
Siemensstraße 1-8
25436 Tornesch
Phone: +49 4101 706 01
Fax: +49 4101 706 200
info@tramaco.de
www.tramaco.de

ROWA Lack GmbH
Technical Polymers and Blends
Siemensstraße 1-3
25421 Pinneberg
Phone: +49 4101 706 03
Fax: +49 4101 706 300
info@rowa-lack.de
www.rowa-lack.de

ROWASOL GmbH
Special Coating Systems, Top Coats and Compounding Systems
Siemensstraße 1-5
25421 Pinneberg
Phone: +49 4101 706 04
Fax: +49 4101 706 400
info@rowasol.de
www.rowasol.de

ROWASOL GmbH
Liquid Colours and Additive Compounds,
Siemensstraße 1-3
25421 Pinneberg
Phone: +49 4101 706 05
Fax: +49 4101 706 254
info@rowasol.de
www.rowasol.de

ROWASOL GmbH
Liquid Colours and Additive Compounds,
Siemensstraße 1-3
25421 Pinneberg
Phone: +49 4101 706 06
Fax: +49 4101 706 400
info@rowasol.de
www.rowasol.de

ROWA France S.a.R.L
Distribution of ROWA GROUP products in France
7, rue Albert Einstein 77420
Champs sur Marne
Phone: +33 1 646 81 616
Fax: +33 1 646 81 300
info@rowa-france.com
www.rowa-france.com

ROWA France S.A.R.L
Distribution of ROWA GROUP products in the USA
110 Phyllis Dr Croydon, PA 19021 USA
Phone: +1 609 567 8600
sales@rowainc.net
www.rowainc.net

ROWA Inc.
Production and distribution of ROWA Lack products in China
Rm 1218, Black A2, R&D Park, Lane 587, Jiehai Rd
Hi-Tech Zone, Ningbo City
Zhejiang Province, P.R.China
Phone: +86 574 87229282
info@rowa-korea.com
www.rowa-korea.com

ROWA Asia Pte Ltd.
Production and distribution of ROWA Lack products in Asia
511-16, Jooe Ajagi, Yeon Yoo Rid
Yeosan-Gun, Chungnam-Do
Park, Lane 587, Jiehai Rd
Hi-Tech Zone, Ningbo City
Zhejiang Province, P.R.China
Phone: +86 574 87229282
info@rowa-korea.com
www.rowa-korea.com

ROWA France S.A.R.L
Production and distribution of ROWA GROUP products in France
110 Phyllis Dr Croydon, PA 19021 USA
Phone: +33 1 646 81 616
Fax: +33 1 646 81 300
info@rowa-france.com
www.rowa-france.com

More information
www.tramaco.de / Dr. Carsten Mennerich
+49 4101 706 219 / c.mennerich@tramaco.de