



# BERLAC® HYDRO COATING SYSTEMS: ENVIRONMENTALLY FRIENDLY FROM A TO Z.

Among the increasingly rigorous demands placed on modern lacquer coatings for industrial processing have been stricter legal requirements in respect of solvent content and environmental impact. Berlac AG has responded to this situation by enhancing its conventional product portfolio with the addition of trendsetting waterborne lacquering systems for demanding applications. Formulated with innovative ingredients, the water-based **Berlac® Hydro** line is fully comparable in the quality of its appearance and resistance with conventional solvent-based systems. As non-inflammable lacquers, with significantly lower VOC content and very good processability, **Berlac® Hydro coating systems** represent an impressive combination of cutting-edge technology, environmental conservation, work safety and economy.

## TECHNOLOGICAL DESCRIPTION

Depending on the amount of wear entailed by the application, the **Berlac® Hydro coatings** can be used on polymers and metals either as a multi-coat system consisting of primer / base coat / clear coat or of base coat / clear coat, or as a single-coat surface finish with 1-component or 2-component systems. The premium-quality systems are precisely adapted in each individual case to the demands of the application and the customer's processing requirements. Provided substrates are pre-treated correctly as prescribed and relevant processing and application parameters are adhered to, the systems offer outstanding adhesion on a host of commonly-used plastics and metals.

## FIELDS OF APPLICATION

Irrespective of the sector concerned, the water-based **Berlac® Hydro coating systems** are ideal for the decorative and functional coating of plastic and metal components, both for interior and exterior applications. Customers can choose between 1- and 2-component products. The specialists at Berlac AG will be pleased to recommend appropriate products and give advice on how they should best be used.

## YOUR ADVANTAGES AT A GLANCE

- **Broad palette of colours and effects for designers:** unlimited range of colours, imitation of a wide variety of metallic, nacreous and tactile effects; level of gloss can be individually adjusted
- **Reliable and reproducible method of application:** using automated coating processes, on both pneumatic and electrostatic equipment
- **Straightforward processing:** on the appropriate equipment and using applicational processes standard for the sector
- **Lasting top-quality component surface:** uniformly high adhesive properties and resistance throughout the entire life-cycle of the product
- **Flexibility:** parts can be handled soon after application thanks to rapid forced drying
- **Cost-efficient coating:** 1-component or 2-component products with high covering power can be combined in multi-coat application
- **Ecologically sensible technology:** minimum emissions during both processing and drying thanks to the use of low-VOC formulation



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Lacquers and Effects

## PRODUCT PROFILE

Substrates:	<ul style="list-style-type: none"> <li>● wide range of plastic substrates, including ABS, PC, ABS-PC, PA (6,6, 12), PS, HIPS, GFRP, CFRP, etc.</li> <li>● commonly used metals, such as iron, aluminium, non-ferrous metals, etc.</li> </ul>
Application:	one, two or three coats using 1-component or 2-component products
Systems:	<ul style="list-style-type: none"> <li>● 2-component system available as primers, base coats and clear coats, or as single-coat systems</li> <li>● 1-component system available as single-coat systems, primers and base coats</li> </ul>
Level of gloss:	matt to high-gloss
Colours:	limitless spectrum of colours and effects, comparable to solvent-based systems
Special properties:	<ul style="list-style-type: none"> <li>● adhesion on a variety of plastics and metals subject to appropriate pre-treatment</li> <li>● for interior and exterior applications – depending on recommendation</li> <li>● above-average chemical and mechanical resistance</li> <li>● very good resistance to corrosion</li> <li>● very good resistance to UV and weathering</li> <li>● very good flow properties and very good covering and filling power</li> <li>● rapid drying</li> <li>● post-printing possible with BerlaPrint® printing inks (screen or pad printing)</li> </ul>
Design range:	<ul style="list-style-type: none"> <li>● annual launch of new colour collections</li> </ul>
<b>1-component systems for interior use:</b> Applied as system using 2-component products, also suitable for exterior use	<ul style="list-style-type: none"> <li>● good resistance to alcohol</li> <li>● very fast drying – can be handled after 20 mins drying at 60°C</li> <li>● metallic effects with very high brilliance can be achieved</li> <li>● good resistance to creams and perspiration</li> </ul>
<b>2-component systems for interior and exterior use:</b> Can be combined in systems with 1-component products for both interior and exterior use	<ul style="list-style-type: none"> <li>● pot life approx. 3 hours / can be applied without difficulty with 2-component equipment</li> <li>● direct adhesion to various plastics</li> <li>● high condensation resistance</li> <li>● ultra-high-gloss finishes can be achieved</li> <li>● can be adapted for special applications requiring high abrasion resistance</li> <li>● can be handled after 30 mins drying at 80°C</li> </ul>

## TEST RESULTS

Cross-cut adhesion:	Gt0
Condensed water-constant climate, 240 hr/40°C at 96% humidity + 1hr regeneration:	Gt0, no change
Hydrolysis test 72hr/90°C at 96% humidity (climate chamber):	Gt0, no change
Salt spray test NSS in compliance with EN ISO9227-2012, 250h – 560 h – 1000h:	Gt0, migration <5mm, no blistering/no change

## BERLAC AG – COATING SYSTEMS TO GIVE YOUR PRODUCTS STRIKING ADDED VALUE

The production of premium-grade special and effect coatings as well as printing inks for decorative and functional applications on plastic, chromium-plated and metallised substrates, carbon fibre composites, metal and glass has been our speciality since 1928.

Whether you are an industrial contract coater, a tier-one or tier-two supplier coating in-house or an OEM, you will find us your ideal development partner for innovative niche solutions that call for interdisciplinary knowhow and precise adjustment to the processes of all your supply-chain partners. We accompany your innovative surface projects in close collaboration every step of the way from initial concept to technical fine-tuning for series applications on site.

Our comprehensive expertise and experience in manufacturing a product portfolio that ranges from primers through printing inks enables us to supply ideally coordinated integrated solutions (thermal and UV-curing) in the realm of solvent-based and waterborne spray coating systems and industrial screen and pad printing inks. Our innovative solutions for demanding coating tasks – also available in very small batches and for small series production – cater primarily to the following sectors: automotive, spectacle frames, domestic appliances, hearing aids, children's toys, medical technology, sanitary fittings, writing implements, sport, watchmaking and jewellery.

Headquartered in Sissach, just outside Basel in Switzerland, Berlac AG is one of the eight brands that comprise the Berlac Group, a globally-active group of medium-sized companies committed to the development and manufacture of top-flight solutions for finishing and protecting surfaces and for colouring plastics.