



## YOUR ADVANTAGES AT A GLANCE

- **Broader colour palette for designers:** in the realm of spray paints
- **Economical processing:** no need for expensive supplementary technologies
- **Reliable application:** selective qualification of contract coaters world-wide in coordination with the OEMs in the automotive industry
- **Unlimited capacity:** can be used with conventional coating equipment
- **Broad application spectrum:** suitable with all component sizes, shapes and thicknesses and a wide range of substrates
- **Potential for functionalisation:** laser-engravable and translucent, designed for post-process printing by means of pad printing
- **Environmentally-friendly technology with a future:** contains no REACH-critical ingredients such as Chrome (III) and Chrome (VI)
- **Highly resistant coating solution:** complies with German automotive specifications (interior and exterior uses)

## UNIQUE CHROME LOOK FROM SIMPLE LACQUER COATING

As a pioneer in the development of chrome replacement paints, Berlac AG includes **Berlac® Reflexion** in its portfolio, a mirror-smooth 3-coat paint system in automotive quality which stunningly imitates the appearance of chromed surfaces to a standard never achieved on the market so far. The results produced in automated coating processes on the widest range of component geometries are those obtained by electroplating or PVD metallisation.

With **Berlac® Reflexion** being an environmentally-friendly alternative to real chrome processes, designers in the automotive industry and all other life-style-oriented industrial sectors are unbound by any limits when it comes to demanding plastic application with visually refined high-end surfaces, even following the introduction of the Chrome VI ban.

### TECHNICAL DESCRIPTION

The 3-coat system consisting of PUR primer, base coat and PUR clear coat combines outstanding resistances with a wide spectrum of chrome effects.

The cornerstone of **Berlac® Reflexion** is a specifically designed primer as an adhesive bridge to many different substrates. Explicitly tailored to this primer and to the clear coat, the very thinly applicable, yet high coverage **Reflexion** base coat with special reflective pigments enables – in compliance with strictly predetermined spraying and drying parameters – brilliant effects together with an exceptional adhesion between the base coat and the clear coat. Compared to a conventional silver pigment, the pigments used in the **Reflexion** base coat ensure a stronger flop effect and a more intense reflection. The subsequent clear coat additionally protects against weathering influences, as well as mechani-

cal and chemical impact and allows various levels of gloss.

### FIELDS OF APPLICATION

**Berlac® Reflexion** has been approved by the automotive industry for both interior and exterior uses. Typical application areas include trim strips and covers, ventilation rings, operating elements as well as emblems and logos.

**Berlac® Reflexion** is the perfect choice for the automotive industry since it represents an alternative surface finish to galvanising and PVD coating. It complies with REACH requirements, provides corrosion resistance for critical exterior components, is hardly affected by bottlenecks in contract production capacity and offers persuasive economic advantages, especially in respect of highvolume models.

The coating system is also ideal for all manner of decorative applications in other sectors where a top-quality chromed surface is required, but where economic considerations preclude conventional chromium plating or PVD metallisation.



## PRODUCT PROFILE

Tested in compliance with	TL 226 / TL 211 / DBL 7384
Tested on	PC/ABS (T65, T85 XF), PC, ABS
Substrates	Wide range of plastics
Application	3-coat application essential
System	Primer black/grey: 2-component PUR system Base coat glossy: 2-component system Top coat: 2-component PUR system
Levels of gloss	Primer: high gloss Base coat: glossy Top coat: glossy, satin gloss, matt
Colours	<ul style="list-style-type: none"> <li>Basic aluminium, silver and chrome imitations (standard to dark chrome, 3Q7, Silvershadow, Light Silver)</li> <li>Additional colour variations are in development</li> </ul>
Special properties	<ul style="list-style-type: none"> <li>Above average scratch and abrasion resistance and excellent resistance to various chemicals</li> <li>Non-brittle coating solution for delicate and thin-walled components thanks to ultra-thin, elastic coats</li> <li>Laser-engravable for day/night designs: with possible backlighting of symbols, e.g. switches</li> <li>Translucent for applications on semi-transparent plastics, e.g. for creating ambient lighting</li> <li>Printable in pad printing process, as a fourth layer on the top coat (tested according to TL 226 and DBL 7384, approved by Daimler)</li> <li>It is essential to comply with the drying parameters quoted: Primer: 30 min. / 80°C Base coat: 30 min. / 80°C Top coat: 30 min. / 80°C</li> </ul>
OEM approvals	<b>Exterior:</b> Audi, VW <b>Interior:</b> Audi, Daimler, Jaguar, Lotus, Porsche, VW

## TEST RESULTS

Cross-cut adhesion	Gt0
Scratch resistance 4N and fingernails	no breaking of coating film
Abrasion resistance, Crockmeter 2000 double strokes	no change
Heat storage, 216 hours (90 days) at 90°C	Gt0, scratch resistance OK, no change
Condensed water-constant climate, 240 hours/40°C at 96% humidity + 1 hour regeneration	Gt0, no change
Hydrolysis test 168 hours/90°C at 96% humidity (climate chamber)	Gt0, minimal change in appearance
Resistance under the influence of temperature 24 hours/60°C (Coca Cola, orange juice, Nivea Sun SPF15, Nivea cream, sun lotion test blend)	Gt0, no change
Resistance to hand cream and sun lotion, 24 hours/80°C	Gt0, scratch resistance OK, no change
Steam jet test, 150mm distance, water temperature 60°C, 60 sec., pressure 90 bar	value 0 (in accordance with DIN 55662)
Stone impact test	OK

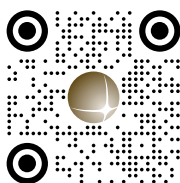
## BERLAC AG – FOR THE DECISIVE ADDED VALUE OF YOUR PRODUCTS

We are founded in 1928, headquartered in Switzerland and a member of the Berlac Group, a globally-active group of companies specialising in the development and manufacture of top-quality solutions for surface coatings and the finishing of PU for various sectors and applications.

As a leading international manufacturer of high-end special and effect coatings for carbon, aluminum, various plastics or metal applications, we supply a wide variety of industries such as automotive, medical technology, sports and leisure, eyewear, sanitary products or watches and jewelry.



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Lacquers and Effects