

Metallic Compounds

for the Automotive Market



LyondellBasell's Silver Metallic Product Line

for the Automotive Market



In the last few years decorative metallic effects had a comeback in modern automotive design. Cool and shiny parts can be found in the vehicles' interior as well as the exterior.

But it does not have to be real metal! LyondellBasell offers a unique silver metallic product line, which is based on various thermoplastic polymers and -blends.

The advantages of an in-depth colored plastic part are twofold. On the one hand, a full in-mold part reduces the handling steps, because spray painting is not needed; on the other hand, the metallic look remains, even if the piece is scratched or damaged at the surface.

Grades are formulated for improved processability in molding, injection molding or extrusion. Depending on customers' needs, our silver metallic solutions can also come with different surface effects and different basic polymers.



PRODUCT BENEFITS

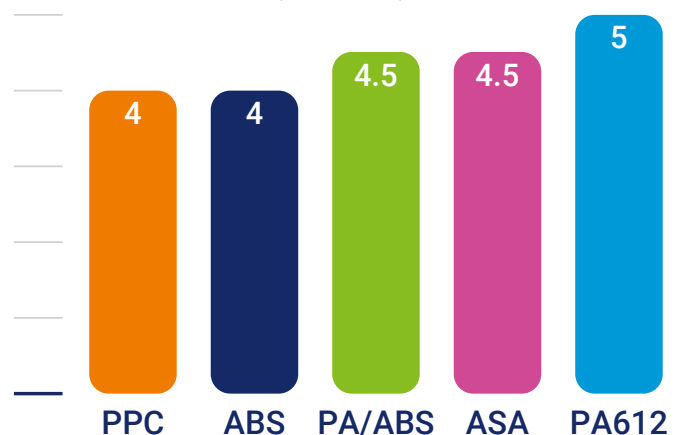
- Excellent solutions for paint-replacement
- Outstanding scratch resistance
- Extended UV stability for harsh exterior conditions

Weathering / UV resistance

LyondellBasell metallic compounds not only excel at the aesthetics of the surface but also offer excellent resistance against weathering and extended UV exposures to maintain the excellent Metallic surface effect.

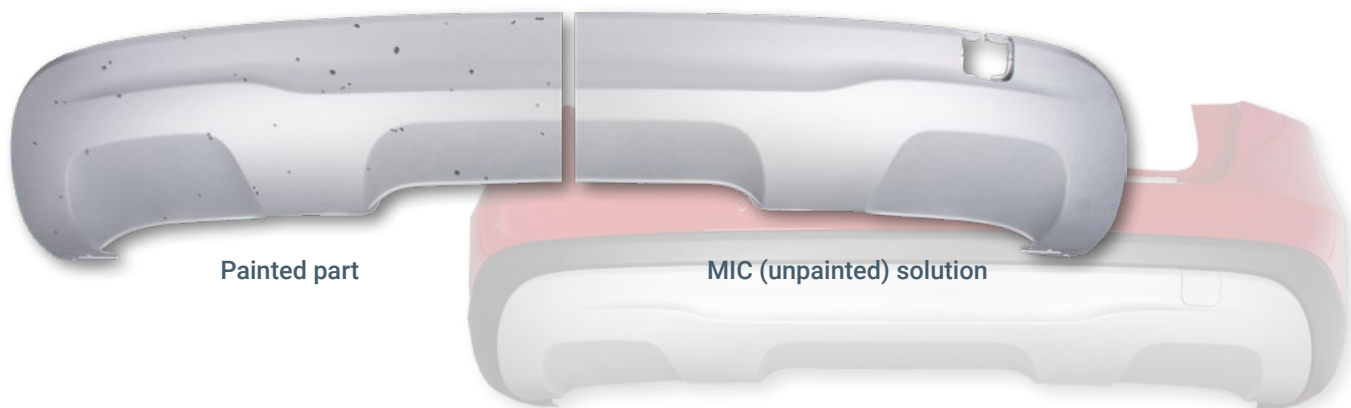
Below is a short overview of material performance of each of the polymers when exposed to prescribed tests as per their respective OEM Norms:

Change in colour after UV test
(GMS Note)



Stone Chip: Paint vs. Mold-In-Color (MIC) Solution

- LyondellBasell's MIC solution provides excellent solution to the problems of "Stone-Chip" with painted surfaces.
- Stone chip on a painted surface results in a prominently visible mark, devaluating the appearance of the part.
- On the other hand, with MIC solutions the Stone Chip is hardly visible, despite the damage caused in form of a "scratch"



LyondellBasell Metallic Compounds

Decorative materials now with Mold In Color Solutions

LyondellBasell metallic compounds deliver high gloss and deep metallic effects in any color and multiple base polymers. Custom made solutions help meet the specific demands of the application.

Product features

- The right choice and combination of metallic pigments offers a superior metallic effect
- Color shades can be matched according to customers' needs
- Depending on part- and mold geometry, replacement of spray painting is possible
- For new projects LyondellBasell offers an expert technical support such as injection molding simulation, guidance on mold and part design and practical support on site of processing

Molding metallic compounds without painting – crucial factors to be considered:

- Optimized part design (wall thickness, corners, holes etc.)
- Improved mold design (gate positioning, nozzle and runner setup, number of cavities)
- Positioning of weld lines into non-visible areas

<i>Ronfalin (ABS)</i>	<i>Ronfalin (ASA)</i>	<i>Hifax</i>
<ul style="list-style-type: none"> High-flow for easy injection molding grade High impact ABS grade for robust and long-life parts 	<ul style="list-style-type: none"> High-flow for easy injection molding grade Extra UV stabilized for Automotive exterior application 	<ul style="list-style-type: none"> Optimized flow behavior to avoid tiger stripes/flow-lines Extended UV stability for harsh exterior conditions
<i>Schulamid 612</i>	<i>Schulablend (PA/ABS) M/MK</i>	<i>Schulaketon NV</i>
<ul style="list-style-type: none"> Excellent chemical resistance High heat distortion temperature Good mechanical and dimensional stability 	<ul style="list-style-type: none"> High-flow for easy injection molding grade High impact, LE product optimized for automotive application 	<ul style="list-style-type: none"> High chemical resistance High toughness Excellent resilience

LyondellBasell offers vast experience from past projects and can offer guidance and support if involved in the early design state.

ABOUT US

LyondellBasell (NYSE: LYB) is one of the largest plastics, chemicals and refining companies in the world. Driven by its employees around the globe, LyondellBasell produces materials and products that are key to advancing solutions to modern challenges like enhancing food safety through lightweight and flexible packaging, protecting the purity of water supplies through stronger and more versatile pipes, improving the safety, comfort and fuel efficiency of many of the cars and trucks on the road, and ensuring the safe and effective functionality in electronics and appliances. LyondellBasell sells products into more than 100 countries and is the world's largest producer of polymer compounds and the largest licensor of polyolefin technologies. More information about LyondellBasell can be found at www.LyondellBasell.com.

For more information, visit lyb.com

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