

Metallic compounds for the automotive market



LyondellBasell 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 thermoplasic 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.

Weathering / UV resistance

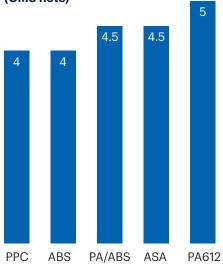
LyondellBasell metallic compounds not only excel at the aesthetics of the surface but also offer excellent resistance against weathering and extended UV exposures to maintain the excellent Metallic surface effect.

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

Product benefits

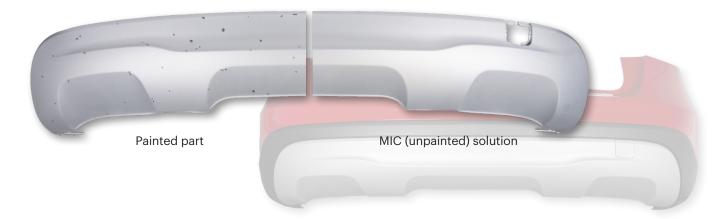
- Excellent solutions for paintreplacement
- · Outstanding scratch resistance
- Extended UV stability for harsh exterior conditions

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'
- 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

Ronfalin (ABS)	Ronfalin (ASA)	Hifax
High-flow for easy injection molding grade	High-flow for easy injection molding grade	Optimized flow behavior to avoid tiger stripes/flow-lines
 High impact ABS grade for robust and long-life parts 	• Extra UV stabilized for Automotive exterior application	• Extended UV stability for harsh exterior conditions
Schulamid 612	Schulablend (PA/ABS) M/MK	Schulaketon NV
Excellent chemical resistance	High-flow for easy injection	High chemical resistance
High heat distortion temperature	molding grade	High toughness
	 High impact, LE product optimized 	

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

About us

We are LyondellBasell (LYB) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world's largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit www.lyb.com or follow @LyondellBasell on LinkedIn.

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