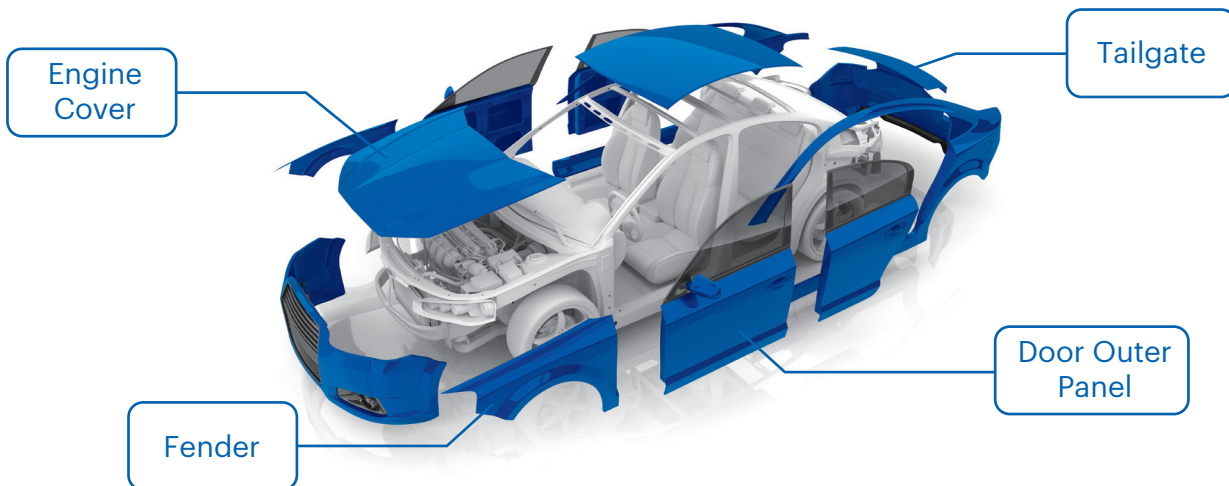


# Automotive: Low-CLTE Body-Exterior-Panel, Polypropylene Compounding



Low coefficient of linear expansion (Low-CLTE) polypropylene compounding is one of the important technical solutions for replacing steel with plastic for New Energy Vehicles (NEV). As a leading multinational chemical company, LyondellBasell has been deeply involved in the development of body exterior panel materials for many years. It has successfully developed the *Hifax* and *Sequel* product series, accumulated extensive experience in material development and application, and can provide customers with customized solutions for NEV body exterior panel materials.

## Features

- Light-weight, Replacing Steel with Plastic
- Design Freedom
- High Stiffness For Structural Integrity
- Meeting tight dimensional and almost “zero” gap designs
- Good processability, Excellent Paint Performance
- Recyclable

## Material Solutions for Body Panel Applications

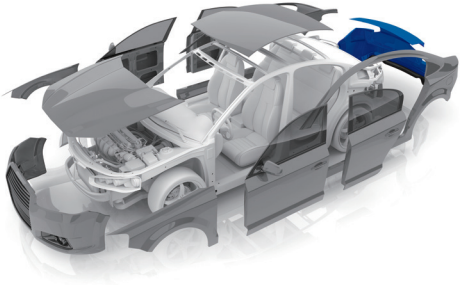
- **Plastic Tailgate**  
- *Hifax*
- **Plastic Fender**  
- *Hifax*  
- *Sequel*
- **Plastic Body-Panels**  
- *Hifax*  
- *Sequel*

## Reasons to Partner with Us.

### Key Advantages

- LYB is a leading company in PPC business, providing our customers with a wide range of differentiated and value-added solutions.
- Advantages of global footprint and know-how: helping China OEMs and manufacturers of customer goods to grow globally.
- Expertise in regulations/risk management/safety in the global auto market for sustainability products.
- Innovation-oriented market approach.

# Design Selection Example



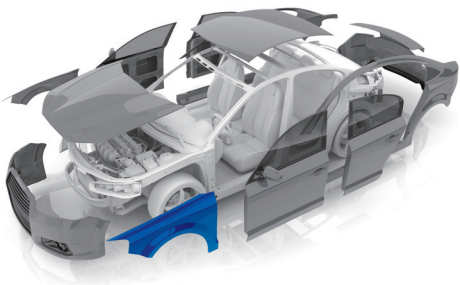
## Tailgate Out-Panel

The car tailgate refers to the door on the back of the car. It ensures the safety of items in the trunk and is one of the most important body exterior panels. The tailgate is closely connected with other body parts, requiring an extremely high appearance quality of the vehicle.

With the rapid development of NEV, the demand for lightweight materials for tailgates is increasing. Considering its lightweight nature, cost-effectiveness, and design freedom, the plastic tailgate is emerging as a trend of using lightweight new materials.

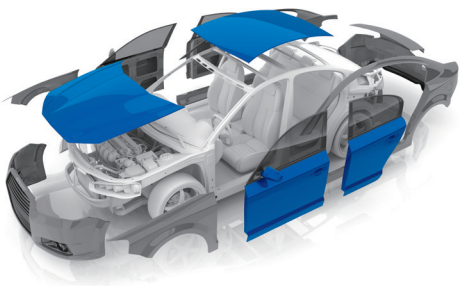
The excellent rigidity of our *Hifax* series products can effectively meet the mechanical performance requirements of structural parts.

Additionally, the low CLTE of these products ensures the dimensional stability of large parts at different temperatures. At the same time, *Hifax* has an excellent appearance performance of pressure line on large and complexly designed outer panels.



## Fender

The car fender refers to the two panels above the left and right front wheels of the car. It prevents sand, gravel, mud, etc., rolled up by the wheels from splashing onto the bottom of the car, thereby protecting the body. It is one of the most important body exterior panels. The fender must be made out of materials with very high rigidity and dimensional stability. Our *Hifax* and *Sequel* series products have excellent performance and can easily meet the mechanical, molding, appearance, and other requirements of the fender parts.



## Body-Exterior-Panel

The lightweight technology used in NEVs can greatly improve their cruising range, thereby effectively promoting the development of the NEV industry. For large-body exterior panels, our *Hifax* and *Sequel* series products will continue to support the lightweight development of NEVs.

# 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](http://www.lyb.com) or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

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