

# Automotive Solutions

**ISOVER Insulation Solutions**  
for Cars, Trucks and Buses



**ISOVER**  
SAINT-GOBAIN

# Introduction

## **ISOVER as a part of the Saint-Gobain Group**

For more than three centuries, Saint-Gobain has used its technological expertise and knowledge of markets to supply products that reflect its customers' and partners' needs.

The Saint-Gobain Group has earned a reputation for innovation, responsiveness and productivity by anticipating and developing solutions for its customers' increasingly complex needs.

Thanks to a presence in more than 67 countries, Saint-Gobain is able to advise and deliver the most appropriate solutions to its partners.



### ***ISOVER solutions for Eco Design***

As the world's leading insulation manufacturer, ISOVER has highlighted the importance of effective insulation in technical areas such as Marine and Offshore, Industry, HVAC and Original Equipment Manufacturer (OEM) such as the automotive industry.

We have used our recognised skills in innovation to bring:

- High-level acoustic and thermal performance
- Safety and sustainability
- Effective energy management
- Light-weight solutions



# Solutions for Cars, Trucks and Buses

ISOVER continuously works with the automotive industry to develop state-of-the-art solutions that optimize acoustic and thermal efficiency in cars, trucks and buses.

With a reputation for quality products and total commitment to customer satisfaction, we have developed strong partnerships of the leading players for cars, trucks and buses insulation.

ISOVER does not only offer existing high technology solutions, but also works to develop the optimum solution for your particular product. Our development team will help design tailor-made components. As soon as we can get into the development process, the more you will benefit from our long-lasting experience. With our client's performance and space specification in hand, we are used to working under tight deadlines to provide you with the right product just-in-time.



ISOVER Glass wool Automotive solutions meet the highest standards of performance, combining excellent acoustic and thermal efficiency, with fire safety and mechanical durability.

By choosing ISOVER, customers can rely on the right components that match their highest requirements, along with superior quality and a fast and reliable customer service team.



# ISOVER Glass wool: A material that combines perfectly all key strengths that you are looking for.

For cars, trucks and buses, ISOVER has developed specific glass wool products, tailored to the needs of the Automotive industry. They combine acoustic, weight and cost efficiency with the highest thermal insulation performance to withstand operating temperatures of up to 230°C.

### Glass wool:

A cutting edge material with key strengths: perfectly designed by ISOVER



**Optimal acoustic performance**



**Unique lightness**



**Excellent thermal insulation**



**High operating temperature**



**Effective fire protection**



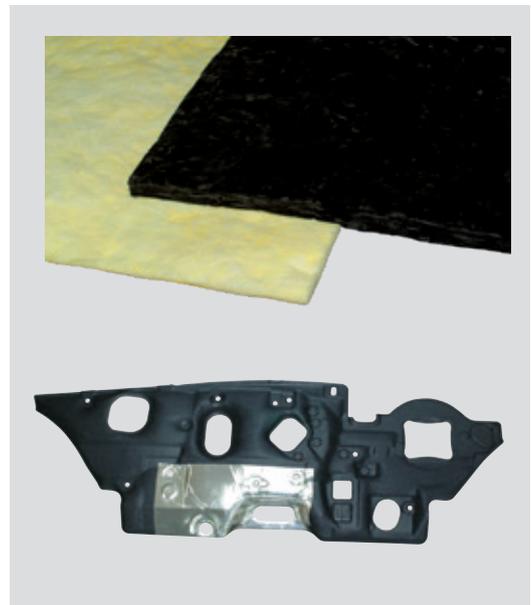
**Mechanics and durability**



**Active environmental protection**



**Cost effective solutions**



# Your Product Compass

Because comfort is key, ISOVER helps you to achieve a perfectly quiet environment inside & outside your vehicle.



Our products, suitable both for the engine bay and for the driver's compartment, offer a high thermal and

acoustic insulation capacity to ensure a smooth and comfortable ambiance for the passengers.



Product	Gramweight	Dimensions	Facing	Packaging
<b>GW Green Mat for molded parts available in black or yellow</b>	<ul style="list-style-type: none"> <li>• 300 to 400 g/m<sup>2</sup> Tolerance -15% +15%</li> <li>• 500 g/m<sup>2</sup> to 1800 g/m<sup>2</sup> Tolerance -10% +15%</li> </ul>	<ul style="list-style-type: none"> <li>• Standard width: 820 mm to 1530 mm*</li> </ul>	Several facing options: <ul style="list-style-type: none"> <li>• Polyester or Polypropylene</li> <li>• Black or white</li> <li>• Fire resistant</li> <li>• Water resistant</li> </ul>	<ul style="list-style-type: none"> <li>• Rolls are packed in polyethylene bags</li> </ul>

\*For other dimensions, contact our sales teams

# Customization



For specific markets, ISOVER offers plastified parts. Our development teams can assist you with the right components for your tailor-made product.

We can visualize how components will look like and function, as well as digitally recreate the actual conditions of use. Contact us with your design specifications and requirements.

# Automotive Product Range

Benefit from high performance insulation solutions with ISOVER mineral wool.

Our materials can be used to produce pieces for the engine bay: sound absorbers for hoods, dash outers, parts close to the engine and underbody parts.

We can also provide insulation for the driver compartment: head liners, door panels, dash inners, parcel shelves etc.

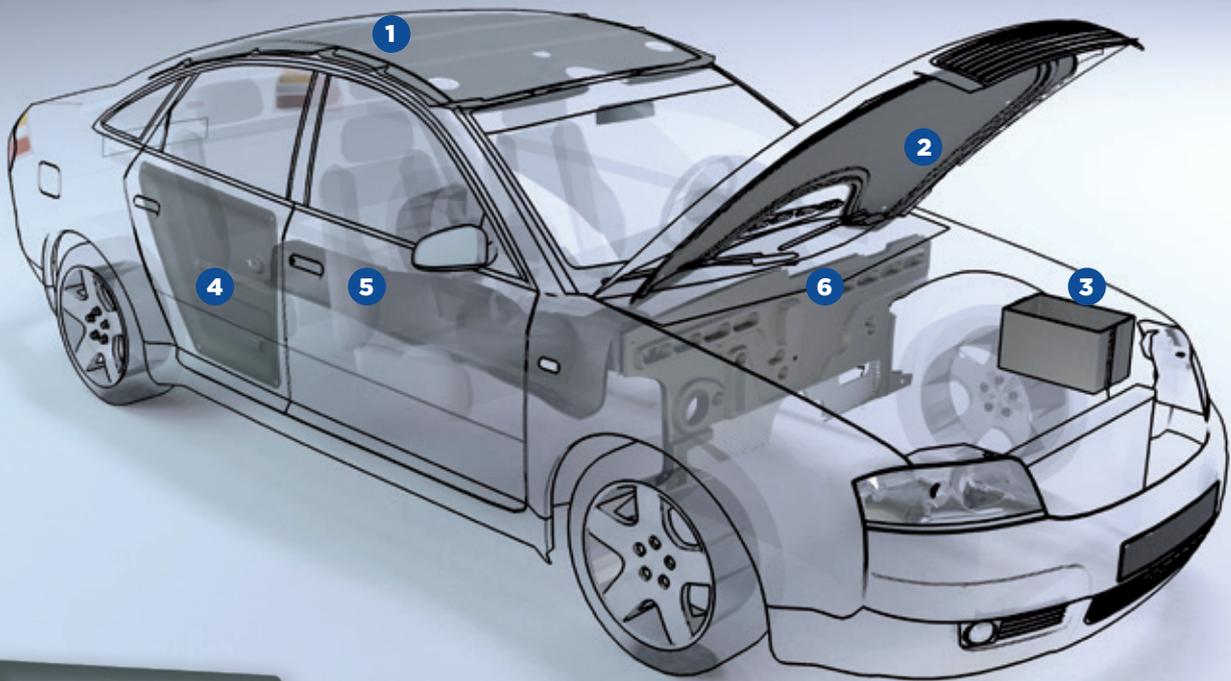
**1** Head Liner



**2** Hood Liner



**3** Battery Cover



**4** Door Panel



**5** Tunnel



**6** Dash Outer



# Performance Guide: all your requirements in one product

ISOVER has developed a range of high performance insulation products to meet the most demanding requirements of the automotive market.



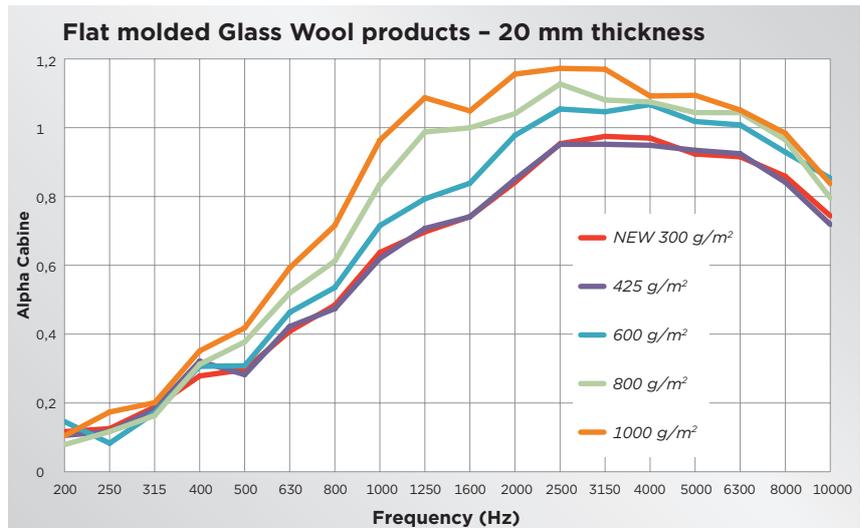
## Acoustic Insulation

ISOVER glass wool for noise reduction: An efficient acoustic insulation, especially for mid and high frequencies.  
ISOVER is your partner to develop acoustic solutions fulfilling the stringent new European norm on noise emission.



## Light-weight

We aim for the best solution in terms of costs and weight for effective sound reduction.  
For instance, our solutions can obtain the same acoustic absorption as cotton with just half the weight.



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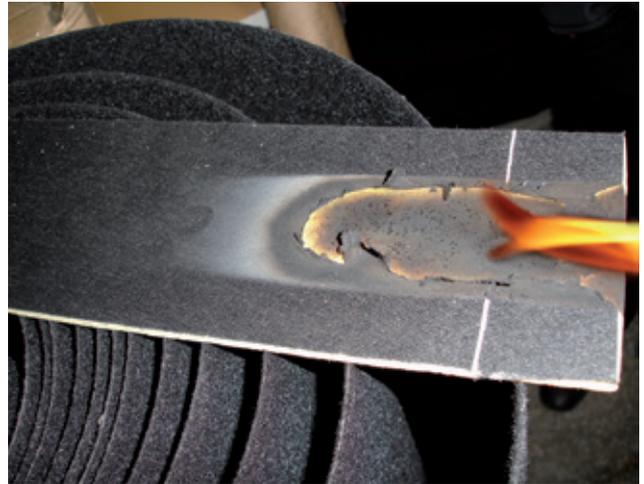
# Performance Guide: all your requirements in one product



## Fire Protection

ISOVER is your partner for fire safety applications that need to meet the highest demands.

Our products help to fulfill automotive standards including FMVSS302. Depending on the surface material, the products are designed to meet fire tests, such as ISO 5660 and ISO 5658, and even more stringent tests, like the Scandinavian one for trucks - test method SS 02 48 21 (INSTA 410).



## Molding

ISOVER products are ideal for molding processes, an important phase of conversion into finished insulation parts.

Mineral wool is a material that is easy to process. With compression molding, die cutting and sawing, we can produce components in almost any shape to meet your needs.

Additionally, parts are coated with different finishes. Such coatings impart hydrophobic and oleo phobic qualities and enable the parts to withstand high surface temperatures.

- **Efficient productivity and energy savings during transformation**
- **Flexibility without cracking even with low gramweight.**





## Mechanics and Durability

Molded parts with ISOVER glass wool maintain excellent mechanical resistance and stability throughout the vehicle life-time.

Our products provide excellent resistance to ageing and vibrations. Their strength enable to reduce the number of fixing brackets compared to other type of insulation material.

Consisting mainly of inorganic material, mineral wool is highly durable and moisture resistant.



- *Durable solutions at high performance.*

- *Rigidity, structural and self-supporting parts.*

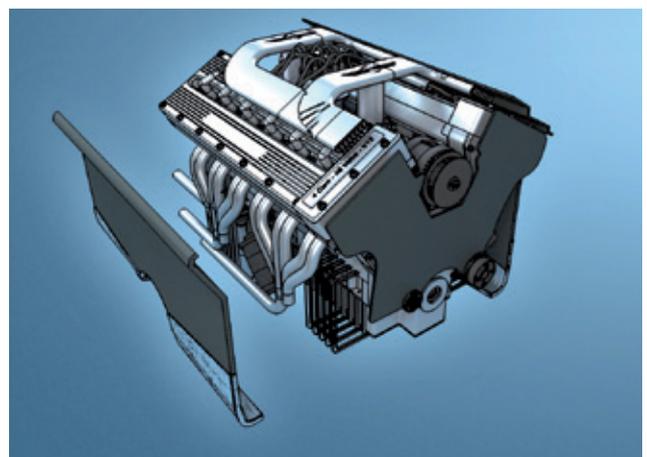


## Excellent Temperature Resistance

ISOVER's solutions are ideal for engine encapsulation to reduce noise emissions close to the source while maintaining an optimal engine temperature. Glass wool molded parts can sustain temperatures up to 230°C.



*Encapsulation solutions for engine and battery parts*



# Performance Guide: all your needs in one product



## Thermal Insulation

ISOVER glass wool products guarantee a strong barrier against heat loss, maintaining the right temperature to optimize engine performance and reduce CO<sub>2</sub> emissions.

Once installed, our products act as thermal screens to protect the vehicle parts from hot points.

*ISOVER's Automotive products reach the same thermal performance as cotton with half of the weight.*

### Thermal Conductivity (lambda at 10°C in mW/(m·K))

Thickness (mm)	500 g/m <sup>2</sup>	1000 g/m <sup>2</sup>
5	33	37
10	32	33
20	34	32
30	36	33





## Environment, Health & Safety

All ISOVER mineral wools are bio soluble and 100% recyclable, made almost entirely of natural raw materials. Our automotive mats are elaborated from 80% recycled material.



Performing LCA on its glass wool products since 1994, ISOVER is your partner for eco-design solutions.

ISOVER mineral wool products are non-carcinogenic in accordance with EU criteria. They are certified by the EUCEB and RAL quality labels “Products made of mineral wool”.

**Molded parts produced with ISOVER glass wool are passing the requirements for the driver’s compartment VOC and formaldehyde emissions.**

**LCA (Life Cycle Assessment) =**  
*All steps of a product’s life cycle,*  
*from production / extraction until removal / reuse.*



**From Cradle to Grave**





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