



STYRON™

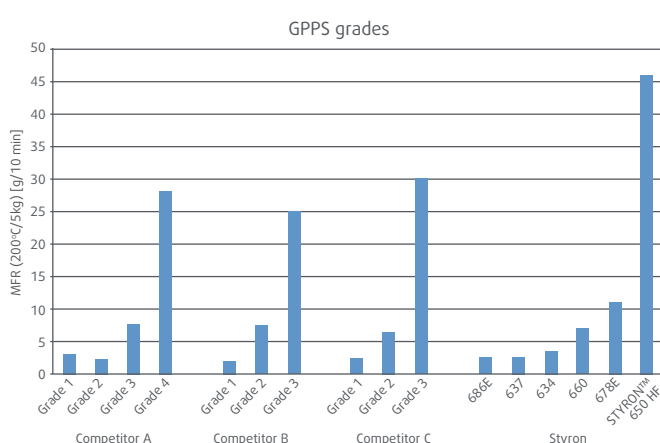
STYRON™ 650 High Flow Polystyrene Resin

Styron's new high performance resin for thick insulation boards

To further expand our portfolio of STYRON™ grades targeting the building and construction market, we present STYRON™ 650 HF, a new General Purpose Polystyrene solution specifically designed for high gauge extruded foam insulation boards. Using Styron's proprietary process technology, STYRON™ 650 HF has been successfully tested and approved by several Extruded Polystyrene (XPS) accounts.

Some STYRON™ 650 HF characteristics include:

- Very high melt flow rate
- Optimized molecular architecture to produce thick insulation boards
- Well suited for foaming with gases such as CO₂ and HFC
- High strength and heat resistance
- Possible processing and cost optimization to suit your application through blending with STYRON™ 686 or STYRON™ 660



Caption: STYRON™ 650 HF has highest melt flow rate in the marketplace

Advantages and Benefits

Easy Processing and consistent high-production output

The unique very high melt flow rate (46g/10min) directly influences the speed with which STYRON™ 650 HF can be extruded in a stable manner, resulting in a consistent high-production output. It also allows for reduced processing temperatures, leading to lower energy consumption during manufacturing of the boards. The resin is particularly suitable for the production of high quality insulation boards with thicknesses of up to 18 cm.

Blending with low melt flow rate grades like STYRON™ 686 or medium flow grades like STYRON™ 660 can further help to increase the ease of processing, producing more stable boards and optimizing cost-efficiency depending on your specific application.

Improved thermal insulation, high strength, heat resistance and dimensional stability

STYRON™ 650 HF has a tailored molecular architecture that results in a unique foaming behavior and an optimal cell size, resulting in boards with an improved thermal insulation. Building on Styron's proprietary process technology, STYRON™ 650 HF allows you to manufacture high gauge insulation boards with high strength, high heat resistance and excellent dimensional stability.

Low Lambda value

STYRON™ 650 HF unique processing and foaming attributes allow XPS insulation board producers to achieve very low thermal conductivity levels.

High Quality Surface Finish

In addition, the material allows Extruded Polystyrene (XPS) customers to produce high quality insulation boards with good surface finish and board thickness stability.

Targeted End Applications

STYRON™ 650 HF was developed specifically for foamed XPS insulation panels for building and construction. Additionally, it is suited for compounding and master batches, due to its high MFR, for non-food applications.

Styron in Building and Construction:

The building & construction industry continues to witness more stringent regulations and new energy consumption incentives, which has an impact not only on building design and footprint, but also on the products that are used to create them. Builders are continuously looking for new materials that allow them to further improve insulation boards. Our team understands this need for developing high-quality, energy efficient insulation products that will meet tomorrow's requirements. With STYRON™ 650 HF an unprecedented combination of processability and application performance in insulation boards is available today.



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