

**Altuglas® V Resins**

*Non impact-modified resins exhibit the following features:*

> Greatest optical performances of all existing thermoplastic materials (92% LT / 0.5% haze) to ensure crystal sparkle and brilliance even at high thickness,
> Outstanding resistance to mechanical damage and discoloration by ultraviolet rays; years of outdoor exposure have no visible effect on Altuglas® PMMA,
> Unsurpassed surface hardness (Rockwell M-Scale) and hence scratch resistance ensuring a lasting premium look,
> Higher heat resistance than impact-modified grades (Vicat B50 up to 108°C),
> Good stiffness,
> Delicate feel and sound,
> Ease of colouring (PMMA based MB required for non opaque colours to avoid optical defects).

*Altuglas® V Resins* have, over the years, demonstrated their outstanding performance and benefit and are thus widely used today in the most demanding applications such as automotive tail lights and instrument clusters, light fittings, household appliances, mobile phone displays, optical parts and cosmetic jars, etc.

For both injection and extrusion, no matter how critical the part is, you will find an Altuglas® V Resin to address your processing needs through the wide MFI range (from 2 to 14.5) and custom lubrications available.

**Properties**

*Altuglas® V 046* extrusion resin with high heat resistance.

*Altuglas® V 825T* both injection and extrusion resin with good flow and high heat resistance.

For applications with more stringent purity requirements (e.g. cluster lens), QCB quality material is also available.

*Altuglas® V 920T / V 920* Injection moulding resin with high flow and heat resistance.

*Altuglas® VM* injection moulding resin offering very high flow but slightly lower heat resistance.

*Altuglas® VML* lubricated version of VM intended for injection moulding of complex bulk pieces at lower temperatures while maintaining a perfect crystal look.
Altuglas® Impact Resistant Resins

Altuglas® DR, Altuglas® MI and Altuglas® HFI Impact-Modified Resins exhibit the following features:
- Outstanding impact resistance available (up to 90kJ/m² in unnotched Charpy vs 11kJ/m² for the V range),
- Typical outstanding PMMA optical performance (90 to 92% LT/2% max haze) for a higher-quality look compared to any other available impact resistant material,
- Typical PMMA weathering and ageing resistance; historical know-how and expertise enable Altuglas® to offer perfectly UV resistant impact-modified resins,
- Slightly lower surface hardness and scratch resistance compared to the V range,
- Similar (MI & DR ranges) to slightly lower (HFI range) heat resistance compared to the non impact-modified V range.

Altuglas® MI

Altuglas® MI (Middle Impact) range offers improved flexibility for easier processing (especially during the demoulding and the assembling steps) while maintaining high heat and scratch resistance. Suitable for both injection and co-extrusion processes.

Properties
Altuglas® MI 4T Medium impact resistance with the highest heat and scratch resistance of the Impact range.
Altuglas® MI 7T Higher impact resistance, but slightly lower scratch resistance and heat resistance. The reference material for coextrusion onto ABS substrate.

Altuglas® HFI

Altuglas® HFI (High Flow and Impact) range offers superior flow and mould release properties for an excellent processability and reduced cycle times, even for the most critical injection works.
HFI materials offer outstanding impact resistance and flexibility but somewhat lower heat and scratch resistance than the MI range.

Properties
Altuglas® HFI 7 High impact resistance with very high flow and excellent processability.
Altuglas® HFI 10 Very high impact resistance with light flow.
Altuglas® HFI 15 Highest impact resistant grade in the Altuglas® range, while maintaining good flow; ideal for 3-layer coextrusion and thermoforming of sharp angles.

Altuglas® DR

Highest Impact performance: HFI 15

Properties
Altuglas® DRT Extrusion resin offering very high impact and high heat resistance (100°C in Vicat B50).

Welcome to the world of Altuglas International, subsidiary of Arkema group

Altuglas International, a global integrated leader in PMMA is heavily involved in the technical plastic sector – from MMA monomer to PMMA acrylic glass – creating and manufacturing innovative products to suit customers’ needs worldwide.
Its 1,300 highly committed staff make their contribution daily in our three businesses (MMA, sheet and PMMA resins).
Its four great brand names are references: Altuglas®, Plexiglas® (Americas), Oroglas®, Solarkote®.