

Part Design & Assembly Automotive Guidelines



PLEXIGLAS® acrylic resins from Altuglas International offer:

- Cost-effective part design
- Assembly versatility
- Excellent aesthetics
- Long service life

| | <u>Thermal Methods</u> | <u>Mechanical Methods</u> | <u>Chemical Methods</u> |
|-------------------------------------|------------------------|---------------------------|-------------------------|
| High Strength | ▲ | ○ | ○ |
| Leak proof | ▲ | × | × |
| Repeat assembly | × | × | × |
| Recyclability | ▲ | ○ | ○ |
| Dissimilar materials | ○ | × | ▲ |
| Contamination free | ▲ | × | × |
| Chemical resistance | ▲ | × | ▲ |
| Fast cycle time | ▲ | ▲ | × |
| Low capital cost | × | ▲ | ○ |
| Preferred | ▲ | | |
| Recommended (conditions permitting) | ○ | | |
| Not recommended | × | | |

Design Considerations

Plexiglas® acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

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See MSDS for Health & Safety Considerations.

We manufacture and market PMMA resin and sheet products under the brand name Plexiglas® in North and Latin America, and under the brand name Altuglas® in Asia Pacific, Europe, Africa and the Middle East. Altuglas® and Plexiglas®, Solarkote®, are registered trademarks of Arkema.

Plexiglas acrylic resins may be assembled to themselves or other polymers through thermal bonding (welding), mechanical assembly or chemical bonding. Each of these techniques has certain advantages which should be fully understood for proper assembly technique selection. Plexiglas acrylic resins are compatible with each of these techniques. This versatility provides designers with freedom to create attractive, functional parts cost-effectively. The stability of Plexiglas acrylic resin provides for long service life assemblies even under continuous outdoor exposure conditions.

Altuglas International has a staff of engineers ready to assist you with Plexiglas acrylic resin part design and assembly technique selection. All Altuglas International resin production facilities carry the ISO 9002 certification. This assures that when Plexiglas resins are specified, you receive the quality your application demands. For more information on PLEXIGLAS acrylic resin, call 1-215-419-7049.

PLEXIGLAS[®]
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