TRINSEO™

Fast Facts
North America

MAGNUM™ ABS Resins for Medical Applications

Fast Facts

Consistency and Quality for Superior Results

As the demand for attractive medical equipment grows, manufacturers and molders are looking for materials that provide pleasing aesthetics and advanced performance. They also need to meet the necessary requirements of the medical industry: biocompatibility, regulatory compliance, and sterilization options. Trinseo's MAGNUM™ ABS Resins have been relied on for decades satisfying the most critical needs of medical device designers and fabricators looking to differentiate their products and provide end-user satisfaction. MAGNUM™ ABS Resins are available in custom colors, both natural and opaque.

Advantages

Mass Production Process

- MAGNUM™ ABS Resins are manufactured with continuous mass polymerization technology. This ensures superior lot-to-lot consistency of properties including color, rheology and physical structure. Mass polymerization also results in a purer polymer compared to competitive emulsion ABS resins

Processing Characteristics

- MAGNUM™ ABS Resins are thermally stable and offer a broad processing temperature range. The superior natural whiteness of the resins resulting from the mass production process allows for ease of in-house coloring

Sterilization Options

- Medical devices made of MAGNUM™ ABS resins can be sterilized by gamma radiation, ethylene oxide (EtO) gas, and electron beam radiation and will maintain their essential properties following exposure. Steam autoclave is not recommended. Additional information is available upon request

Applications

MAGNUM™ ABS Resins are commonly used for applications including:

- Diagnostic instrument and home healthcare housings
- Disposables such as stopcocks, fittings, locks, spikes, clamps and syringe plungers
- Instrument handles
- Surgical (skin) stapler housings
- Trays and kits
- Pumps and oxygenators
- Dental equipment housings

Table 1: Available Resins

Grade	Features	Melt Flow Rate (230 °C / 3.8kg)	Notched Izod Impact (ASTM D256)	Vicat Softening Temp (ASTM D1525)	Biocompatibility (additional information is available upon request)
8391 MED	High Toughness, Glossy	8	4.4 ftlb/in	99 °C	ISO 10993

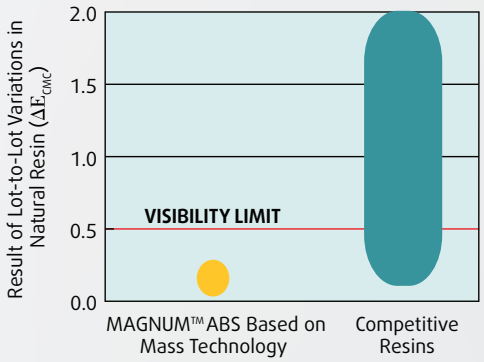
Committed to the medical industry. MAGNUM™ ABS Resins join our growing portfolio of polycarbonate and advanced engineering resins for medical applications. In addition to offering MAGNUM™ ABS Resins, EMERGE™ Advanced Resins and STYRON™ Polystyrene Resins for medical equipment housings, Trinseo provides CALIBRE™ Polycarbonate Resins for single-and multiple-use medical devices, including our CALIBRE™ MEGARAD™ Polycarbonate Resins that are specifically designed to reduce color shift following gamma or electron beam radiation.

For more information on MAGNUM™ ABS Resin or other materials for medical equipment housings or to request a sample, contact us at 1-855-TRINSEO, or visit us online at http://www.trinseo.com/na/en/industries/medical/housings.htm.

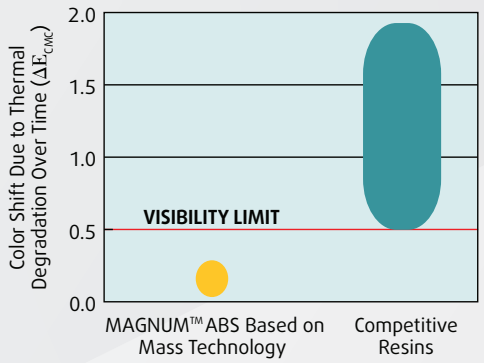
Advantages of
Trinseo MAGNUM™ ABS Resins

Three proven reasons to choose MAGNUM™ ABS resins [1]

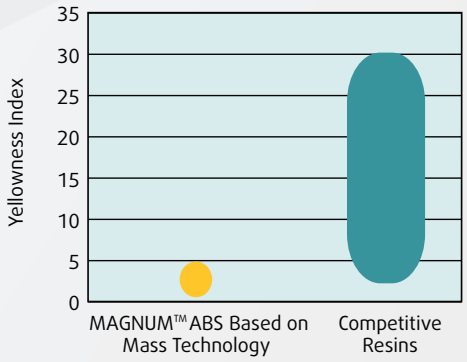
1. Consistency. MAGNUM™ ABS resins have more consistent color, lot-to-lot and run after run.



2. Thermal Stability. MAGNUM™ ABS resins provide among the best thermal characteristics in the industry, resulting in higher color stability.



3. Base Color. MAGNUM™ ABS resins have exceptionally low base color, allowing lower pigment levels for your desired sheet color.



[1] All data based on Trinseo testing. Complete protocols and results available upon request.

Key Benefits

- Excellent processability (wide processing window)
- Lot-to-lot consistency (in properties and performance)
- Superior natural resin whiteness (less pigment needed)
- Compatibility with secondary finishing techniques (ease of solvent and sonic welding)

Because **MAGNUM™ 8391 MED ABS Resins** are medical grade polymers, they are designed to provide the biocompatibility, sterilization options, and molding characteristics required by the medical industry. Biocompatibility testing has been conducted for these polymers.

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North America	
U.S.	+1-855-TRINSEO (+1-855-874-6736)
U.S. & Canada	+1-989-633-1718
Latin America	
Brazil	+55-11-5184-8722
Argentina, Chile, South Region of LAA	+54-11-4319-0100
Mexico, Colombia, North Region of LAA	+52-55-5201-4700
Europe/Middle East/Africa	+800-444-11-444
	+31-11567-2601
Asia Pacific	+603-7965-53-19
China	+86-21-3851-1017
Email	CIG@trinseo.com

www.trinseo.com

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