

**CET® 123**

 Resirene, S.A. de C.V. - *Styrene Methyl Methacrylate Acrylic Copolymer*
**General Information**
**Product Description**

STYRENE ACRYLIC COPOLYMER (SMMA)

**FEATURES**

- Excellent Clarity
- Easy to Process
- Low Density
- FDA Rating: 21 CFR 177.1830
- USP Rating: Class VI Plastics
- Gamma & EtO Sterilizable

**APPLICATIONS**

- Drinkware
- Housewares
- Cosmetic Packaging
- Medical Devices
- Health Care Items

**General**

Material Status	• Commercial: Active
Availability	• Europe • Latin America • North America
Features	• Copolymer • Good Sterilizability • Radiation Sterilizable • Ethylene Oxide Sterilizable • High Clarity • Good Processability • Low Density
Uses	• Cosmetic Packaging • Medical Devices • Packaging • Household Goods • Medical/Healthcare Applications
Agency Ratings	• FDA 21 CFR 177.1830 • USP Class VI
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.09		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	435000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	7250	psi	ASTM D638
Tensile Strength <sup>2</sup> (Break)	8700	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	2.0	%	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	2.0	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.30	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	3.4	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.500 in)	185	°F	ASTM D648
Vicat Softening Temperature <sup>3</sup>	216	°F	ASTM D1525
Optical	Nominal Value	Unit	Test Method
Light Transmittance	92.0	%	ASTM D1003
Haze	0.900	%	ASTM D1003



## Processing Information

Injection	Nominal Value	Unit
Rear Temperature	338 to 356	°F
Middle Temperature	356 to 374	°F
Front Temperature	392 to 410	°F
Processing (Melt) Temp	< 482	°F

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.20 in/min

<sup>3</sup> 3.175 mm

