

## Americas Styrenics STYRON® 686E High Heat Crystal Polystyrene

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Heat Resistant Grade

### Material Notes:

Product Characteristics Exceptional balance between heat resistance, toughness and flow Good dimensional stability and excellent clarity Food Contact Compliant Typical Applications Foamed PS sheets used for packaging e.g. egg trays Thin-wall food packages Medium and heavy section applications in the injection molding field Information provided by Americas Styrenics LLC.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Americas-Styrenics-STYRON-686E-High-Heat-Crystal-Polystyrene.php](http://www.lookpolymers.com/polymer_Americas-Styrenics-STYRON-686E-High-Heat-Crystal-Polystyrene.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.04 g/cc	1.04 g/cc	ASTM D792
Linear Mold Shrinkage	0.0040 - 0.0080 cm/cm	0.0040 - 0.0080 in/in	ASTM D955
Melt Flow	2.4 g/10 min @Load 5.00 kg, Temperature 200 °C	2.4 g/10 min @Load 11.0 lb, Temperature 392 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	107	107	ASTM D785
Tensile Strength at Break	48.3 MPa	7000 psi	ASTM D638
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Elongation at Break	3.0 %	3.0 %	ASTM D638
Tensile Modulus	3.07 GPa	445 ksi	ASTM D638
Flexural Strength	82.7 MPa	12000 psi	ASTM D790
Flexural Modulus	3.17 GPa	460 ksi	ASTM D790
Izod Impact, Notched	0.214 J/cm	0.400 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	90.0 µm/m-°C	50.0 µin/in-°F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	97.8 °C	208 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	89.4 °C	193 °F	ASTM D648
Vicat Softening Point	108 °C	226 °F	ASTM D1525

## **Contact Songhan Plastic Technology Co.,Ltd.**

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