DENKA Transparent Polymer TX-100S

Methyl Methacrylate Styrene

Denka Company Limited

PROSPECTOR®
www.ulprospector.com

Technical Data

Product Description			
DENKA Transparent Polymer TX-100S is a Methyl Methacrylate Styrene (MMS) product. It can be processed by injection molding and is available in Asia Pacific, Europe, or North America. Primary characteristic: flame rated.			
General			
Material Status	• Commercial: Active		
Literature [1]	• Technical Datasheet (English) • Technical Datasheet (English)		
UL Yellow Card [2]	• E49895-241562		
Search for UL Yellow Card	• Denka Company Limited		
Availability	• Asia Pacific	• Europe	• North America
UL File Number	• E49895		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.13	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	1.8	g/10 min	ISO 1133
Molding Shrinkage (2.00 mm)	0.40	%	Internal Method
Water Absorption (Equilibrium)	0.12	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break)	67.0	MPa	ISO 527-2/5
Nominal Tensile Strain at Break	6.0	%	ISO 527-2/5
Flexural Modulus [4]	3400	MPa	ISO 178
Flexural Stress [4]	115	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	2.0	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/Af
1.8 MPa, Unannealed	79.0	°C	
Vicat Softening Temperature	100	°C	ISO 306/B
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index [5]	1.540		ASTM D542
Light Transmittance (2000 µm)	92.0	%	ISO 13468-1
Haze (2000 µm)	0.200	%	ISO 14782

Injection	Nominal Value	Unit
Drying Temperature	70 to 80	°C
Drying Time	3.0 to 4.0	hr
Rear Temperature	190 to 240	°C
Middle Temperature	190 to 240	°C
Front Temperature	190 to 240	°C
Nozzle Temperature	220 to 240	°C
Mold Temperature	40 to 70	°C

Form No. TDS-100857-en
Document Created: Tuesday, December 14, 2021
Added to Prospector: March 2007
Last Updated: 4/22/2014

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[3] Typical properties: these are not to be construed as specifications.

[4] 2.0 mm/min

[5] NA*D ray

Form No. TDS-100857-en

Document Created: Tuesday, December 14, 2021
Added to Prospector: March 2007
Last Updated: 4/22/2014

Where to Buy

Supplier

Denka Company Limited
Tokyo, Tokyo Japan
Telephone: +81-3-5290-5553
Web: http://www.denka.co.jp/

Distributor

Calsak Polymers
Telephone: 800-743-2595
Web: http://www.calsak.com/
Availability: North America

Resin Resource, Inc.
Telephone: 877-652-3431
Web: http://www.resinresourceinc.com/
Availability: North America

Form No. TDS-100857-en

Document Created: Tuesday, December 14, 2021
Added to Prospector: March 2007
Last Updated: 4/22/2014