

# NOVADURAN™ SEF-500T

Polybutylene Terephthalate

Mitsubishi Engineering-Plastics Corp

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

Un-reinforced / Flame Retardant (Bromine-free), Tracking resistant

### General

Material Status	• Commercial: Active		
UL Yellow Card <sup>1</sup>	• E53664-100125289		
Search for UL Yellow Card	• Mitsubishi Engineering-Plastics Corp • NOVADURAN™		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bromine Free	• Flame Retardant	• Tracking Resistant
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose	

Physical	Nominal Value Unit	Test Method
Density	1.31 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	5.00 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage		Internal Method
Across Flow : 2.00 mm	1.8 %	
Flow : 2.00 mm	2.2 %	
Water Absorption (Saturation, 23°C)	0.080 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2700 MPa	ISO 527-2/1
Tensile Stress (Yield)	35.0 MPa	ISO 527-2/50
Tensile Strain (Break)	40 %	ISO 527-2/50
Flexural Modulus <sup>3</sup>	2200 MPa	ISO 178
Flexural Stress <sup>3</sup>	62.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength (23°C)	62 kJ/m <sup>2</sup>	ISO 179

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Annealed	180 °C	ISO 75-2/B
1.8 MPa, Annealed	86.0 °C	ISO 75-2/A
Melting Temperature	224 °C	ISO 11357-3
CLTE		ISO 11359-2
Flow : -30 to 35°C	1.1E-4 cm/cm/°C	
Flow : -30 to 120°C	1.4E-4 cm/cm/°C	
Flow : 35 to 120°C	1.7E-4 cm/cm/°C	
Transverse : -30 to 35°C	1.1E-4 cm/cm/°C	
Transverse : -30 to 120°C	1.4E-4 cm/cm/°C	
Transverse : 35 to 120°C	1.6E-4 cm/cm/°C	
RTI Elec (0.75 mm)	75.0 °C	UL 746
RTI Imp (0.75 mm)	75.0 °C	UL 746
RTI Str (0.75 mm)	75.0 °C	UL 746



Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+15 ohms	IEC 60093
Volume Resistivity	1.0E+16 ohms·cm	IEC 60093
Electric Strength (2.00 mm)	22 kV/mm	IEC 60243-1
Dielectric Constant (1 MHz)	3.50	IEC 60250
Dissipation Factor (1 MHz)	0.019	IEC 60250
Comparative Tracking Index (CTI)	PLC 0	UL 746

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.75 mm	V-0	
1.6 mm	V-0	
3.2 mm	V-0	

Injection	Nominal Value Unit
Drying Temperature - Hot Air Dryer	120 °C
Drying Time - Hot Air Dryer	5.0 to 8.0 hr
Rear Temperature	235 °C
Middle Temperature	240 °C
Front Temperature	250 °C
Nozzle Temperature	245 °C
Mold Temperature	60 to 80 °C
Injection Pressure	20.0 to 150 MPa
Injection Rate	Moderate-Fast
Screw Speed	80 to 120 rpm

**Notes**

<sup>1</sup> 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.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 2.0 mm/min



# NOVADURAN™ SEF-500T

Polybutylene Terephthalate

Mitsubishi Engineering-Plastics Corp

# PROSPECTOR®

www.ulprospector.com

## Where to Buy

### Supplier

#### Mitsubishi Engineering-Plastics Corp

, Japan

Telephone: +81-463-21-8610

Web: <http://www.m-ep.co.jp/>

### Distributor

#### Chase Plastic Services, Inc.

*Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: <http://www.chaseplastics.com/contact/locations>*

Telephone: 800-232-4273

Web: <http://www.chaseplastics.com/>

Availability: North America

#### Nexeo Solutions - Europe

*Nexeo Solutions is a Pan European distribution company. Contact Nexeo for availability of individual products by country.*

Telephone: +34-93-480-9125

Web: <http://www.nexeosolutions.com/>

Availability: Belgium, Bulgaria, Czech Republic, France, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Russian Federation, Slovakia, Spain, United Kingdom

#### The Materials Group

Telephone: 616-863-6046

Web: <http://thematerialsgroup.com/>

Availability: North America

