

Riteflex® 435

Thermoplastic Copolyester Elastomer

Celanese Corporation

Message:

Riteflex® 435 is a Thermoplastic Polyester Elastomer with a 35 nominal Shore D hardness, low modulus and outstanding low temperature impact strength and tear resistance.

General Information	
---------------------	--

Features	Good tear strength
	Low temperature impact resistance
RoHS Compliance	Contact manufacturer
Processing Method	Blow molding
	Extrusion
	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/2.16 kg)	9.0	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Vertical flow direction	1.0	%	ISO 294-4
Flow direction	1.3	%	ISO 294-4

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ISO 868
Shaw A, 15 seconds	91		ISO 868
Shaw D, 15 seconds	35		ISO 868

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	45.0	MPa	ISO 527-2/1A/1
Tensile Stress			
Fracture	16.0	MPa	ISO 527-2/1A/50
5.0% strain	2.00	MPa	ISO 527-2
10% strain	3.00	MPa	ISO 527-2
50% strain	6.00	MPa	ISO 527-2/1A/50
Tensile Strain (Break)	650	%	ISO 527-2/1A/50
Flexural Modulus			ISO 178
-40°C	240	MPa	ISO 178
23°C	35.0	MPa	ISO 178
100°C	19.0	MPa	ISO 178
Flexural Stress			ISO 178
3.5% strain	1.00	MPa	ISO 178

23°C	3.00	MPa	ISO 178
Ross Flex	> 1.0E+6	Cycles	Internal method
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ¹			ISO 34-1
Transverse flow	89	kN/m	ISO 34-1
Flow	89	kN/m	ISO 34-1
Bayshore Resilience			
--	60	%	Internal method
--	65	%	ASTM D2632
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	No Break		ISO 179/1eA
23°C	No Break		ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			ISO 180/1A
-40°C	No Break		ISO 180/1A
-30°C	No Break		ISO 180/1A
23°C	No Break		ISO 180/1A
Unnotched Izod Impact Strength			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	45.0	°C	ISO 75-2/B
Melting Temperature ²	185	°C	ISO 11357-3
CLTE - Flow	2.4E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	2.0E+13	ohms · cm	IEC 60093
Dielectric Strength	25	kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	5.10		IEC 60250
Comparative Tracking Index	> 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	HB		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	100 - 110	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.050	%	
Suggested Max Regrind	25	%	
Hopper Temperature	20.0 - 50.0	°C	

Rear Temperature	185 - 200	°C
Middle Temperature	185 - 200	°C
Front Temperature	185 - 210	°C
Nozzle Temperature	200 - 215	°C
Processing (Melt) Temp	200 - 215	°C
Mold Temperature	20.0 - 55.0	°C
Injection Rate	Moderate-Fast	
Back Pressure	0.00 - 0.345	MPa

Injection instructions

Manifold Temperature: 200 to 215°C Zone 4 Temperature: 185 to 215°C Feed Temperature: 185 to 200°C

NOTE

1. Die C
2. 10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519
Phone: +86 13424755533
Email: sales@su-jiao.com
No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT