

Hytrel® G4774

THERMOPLASTIC POLYESTER ELASTOMER

DuPont Performance Polymers

Message:

47 Shore D Standard Performance Polyester Elastomer with Heat Ageing Protection

General Information			
UL YellowCard	E41938-234592		
Additive	Heat Stabilizer		
Features	Heat Stabilized		
Uses	Film		
	Profiles		
	Sheet		
Agency Ratings	UL Unspecified Rating		
Forms	Pellets		
Processing Method	Casting		
	Extrusion		
	Film Extrusion		
	Injection Molding		
	Profile Extrusion		
	Sheet Extrusion		
	Thermoforming		
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)		
	Isothermal Stress vs. Strain (TPE) (ISO 11403-1)		
	Secant Modulus vs. Strain (ISO 11403-1)		
	Shear Modulus vs. Temperature (ISO 11403-1)		
	Shear Stress vs. Shear Rate (ISO 11403-1)		
	Specific Volume vs Temperature (ISO 11403-2)		
	Tensile Modulus vs. Temperature, Dynamic (ISO 11403-1)		
	Viscosity vs. Shear Rate (ISO 11403-2)		
Part Marking Code (ISO 11469)	>TPC-ET<		
Resin ID (ISO 1043)	TPC-ET		
Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	11	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	11.0	cm ³ /10min	ISO 1133

Molding Shrinkage			ISO 294-4
Across Flow	1.2	%	
Flow	1.5	%	
Water Absorption (24 hr)	2.5	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D	48		
Shore D, 15 sec	43		
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	110	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Break	17.0	MPa	
10% Strain	7.00	MPa	
50% Strain	12.0	MPa	
Tensile Strain (Break)	200	%	ISO 527-2
Nominal Tensile Strain at Break	400	%	ISO 527-2
Flexural Modulus	111	MPa	ISO 178
Abrasion Resistance	33.0	mm ³	ISO 4649
Specific Heat Capacity of Melt	2100	J/kg/°C	
Thermal Conductivity of Melt	0.16	W/m/K	
Effective Thermal Diffusivity	0.0544	cSt	
Emission of Organic Compounds	18.0	µgC/g	VDA 277
Odor	5		VDA 270
Elastomers	Nominal Value	Unit	Test Method
Tear Strength			ISO 34-1
Across Flow	90	kN/m	
Flow	100	kN/m	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°C, Partial Break	120	kJ/m ²	
-30°C	No Break		
23°C	No Break		
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/1A
-40°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-66.0	°C	ISO 974
Glass Transition Temperature ¹	-45.0	°C	ISO 11357-2
Melting Temperature ²	208	°C	ISO 11357-3

CLTE			ISO 11359-2
Flow	2.2E-4	cm/cm/°C	
Transverse	1.9E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Burning Rate (1.00 mm)	33	mm/min	ISO 3795
Flammability Classification			IEC 60695-11-10, -20
1.50 mm	HB		
3.00 mm	HB		
Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	1.01	g/cm ³	
NOTE			
1.	10°C/min		
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

