

Quadrant EPP Ertalyte® TX

Polyethylene Terephthalate

Quadrant Engineering Plastic Products

Message:

Quadrant EPP Ertalyte® TX is a Polyethylene Terephthalate (PET) product. It is available in Europe or North America. Typical application: Food Contact Applications.
Characteristics include:
Flame Rated
Crystalline
Lubricated
Wear Resistant

General Information			
Additive	Lubricant		
Features	Good Wear Resistance		
	Low Friction		
	Lubricated		
	Semi Crystalline		
Agency Ratings	FDA Unspecified Rating		
Appearance	Light Grey		
Forms	Pellets		
Physical	Nominal Value	Unit	Test Method
Density	1.44	g/cm ³	ISO 1183
Water Absorption			ISO 62
23°C, 24 hr, 3.00 mm	0.060	%	
Saturation, 23°C	0.47	%	
Equilibrium, 23°C, 50% RH	0.23	%	
Water Absorption			ISO 62
23°C, 3.00 mm ¹	0.13	%	
23°C, 3.00 mm ²	11.0	mg	
23°C, 3.00 mm ³	5.0	mg	
Service Temperature - Minimum	-20	°C	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale, 10.0 mm)	94		ISO 2039-2
Ball Indentation Hardness (10.0 mm)	160	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ⁴	3450	MPa	ISO 527-2/1B/1
Tensile Stress ⁵ (Break)	76.0	MPa	ISO 527-2/1B/5
Tensile Strain ⁶ (Break)	7.0	%	ISO 527-2/1B/5
Tensile Creep Modulus (1000 hr)	23.0	MPa	ISO 899-1
Compressive Stress			ISO 604/1

5% Strain	95.0	MPa	
2% Strain	47.0	MPa	
1% Strain	24.0	MPa	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	2.5	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	> 30	kJ/m ²	ISO 179/1eU
Notched Izod Impact Strength ⁷	2.5	kJ/m ²	ISO 180/2A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁸ (1.8 MPa, Unannealed)	75.0	°C	ISO 75-2/A
Continuous Use Temperature			
-- ⁹	100	°C	
-- ¹⁰	115	°C	
-- ¹¹	160	°C	
Melting Temperature (DSC)	255	°C	
CLTE - Flow			
23 to 60°C	6.5E-5	cm/cm/°C	
23 to 100°C	8.5E-5	cm/cm/°C	
Thermal Conductivity (23°C)	0.29	W/m/K	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity ¹²	> 1.0E+14	ohms	IEC 60093
Volume Resistivity ¹³	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength ¹⁴ (1.00 mm, in Oil)	21	kV/mm	IEC 60243-1
Relative Permittivity ¹⁵			IEC 60250
100 Hz	3.40		
1 MHz	3.20		
Dissipation Factor			IEC 60250
100 Hz ¹⁶	1.0E-3		
1 MHz ¹⁷	0.014		
Comparative Tracking Index ¹⁸	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
3.00 mm	HB		
6.00 mm	HB		
Oxygen Index	25	%	ISO 4589-2
NOTE			
1.	96 hrs		
2.	Weight, 96 hrs		
3.	Weight, 24 hrs		
4.	Dry		
5.	Conditioned at 23°C/50%RH		
6.	Dry		

7.	Dry
8.	Dry
9.	20000 hrs
10.	5000 hrs
11.	Short periods
12.	Dry
13.	Dry
14.	Dry
15.	Dry
16.	Conditioned at 23°C/50%RH
17.	Dry
18.	Dry

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

