

Product Texts

LEXAN FXD953A is a high viscosity brominated flame retardant, UV-stabilized, light diffusing grade, especially suitable for electrical and lighting applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	6	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2350	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	65	MPa	ISO 527
Strain at break	110	%	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	75	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	14	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	70	kJ/m ²	ISO 180/1A
Izod notched impact strength	12	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Rockwell hardness	R 118	-	ISO 2039-2
Ball indentation hardness	95	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	130	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	141	°C	ISO 75-1/-2
Vicat softening temperature, B	144	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Oxygen index	35	%	ISO 4589-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.7	-	IEC 62631-2-1
Dissipation factor, 1MHz	100	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	17	kV/mm	IEC 60243-1

Optical properties	Value	Unit	Test Standard
ASTM Data			
Light Transmittance	88	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-

Melt temperature	280 - 310	°C	-
Mold temperature	80 - 110	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 290	°C	-
Zone 3	280 - 310	°C	-
Nozzle temperature	270 - 290	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, U.V. stabilized or stable to weather

Features

Light Diffusing

Applications

Aircraft and Aerospace, Automotive, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America