

Product Texts

LNP STAT-LOY D3000IEU6 Compound is a static dissipative Polycarbonate Copolymer based compound that has been designed towards ATEX compliant applications. The material has an optimized balance between surface resistivity and impact strength retention after hydro aging, and has excellent low temperature impact. The material is available in a wide range of dark and light colors, including UV stabilization.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	23	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

ASTM Data			
Melt Flow Index, MFI	15	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
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ISO Data			
Tensile Modulus	1750	MPa	ISO 527
Yield stress	45	MPa	ISO 527
Yield strain	5.5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	1820	MPa	ISO 178
Flexural strength	70	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	60	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	60	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod impact strength, +23°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	60	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	60	kJ/m ²	ISO 180/1A
Izod notched impact strength, +23°C, 3mm	65	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	65	kJ/m ²	ISO 180/1A
Ball indentation hardness	78	MPa	ISO 2039-1

ASTM Data			
Tensile Modulus	1750	MPa	ASTM D 638
Tensile Strength at Yield	45	MPa	ASTM D 638
Elongation at Yield	5.5	%	ASTM D 638
Elongation at Break	60	%	ASTM D 638
Flexural Modulus	1900	MPa	ASTM D 790
Izod Impact notched, 1/8 in	850	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	750	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
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ISO Data			
Temp. of deflection under load, 1.80 MPa	105	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	123	°C	ISO 75-1/-2
Vicat softening temperature, A	137	°C	ISO 306
Vicat softening temperature, B	123	°C	ISO 306
Vicat softening temperature, 120°C/h 10N	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	123	°C	ISO 306
Coeff. of linear therm. expansion, parallel	85	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110	E-6/K	ISO 11359-1/-2

ASTM Data			
DTUL @ 66 psi	123	°C	ASTM D 648

LNP™ STAT-LOY™ Compound D3000IEU6

PC

Saudi Basic Industries Corporation (SABIC)

DTUL @ 264 psi	105	°C	ASTM D 648
Vicat Temperature	123	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Surface resistivity	1E11	Ohm	IEC 62631-3-2
Comparative tracking index	175	-	IEC 60112
ASTM Data			
Surface Resistivity	1E11	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	3.5	%	Sim. to ISO 62
Density	1160	kg/m ³	ISO 1183
Density	1160	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 95	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.03	%	-
Melt temperature	240 - 260	°C	-
Mold temperature	50 - 90	°C	-
Zone 1	220 - 240	°C	-
Zone 2	230 - 250	°C	-
Zone 3	240 - 260	°C	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Applications

Automotive