

Novodur® P4XF
ABS

INEOS Styrolution

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	60	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	43	MPa	ISO 527
Yield strain	2.2	%	ISO 527
Strain at Break	15	%	ISO 527
Impact Strength (Charpy), +23°C	105	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	100	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	14	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	7	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	2400	MPa	ISO 178
Flexural strength	70	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	14	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	7	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Ball Indentation Hardness	105	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	90	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	94	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	96	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	90	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3	-	IEC 62631-2-1
Relative permittivity, 1MHz	2.9	-	IEC 62631-2-1
Dissipation Factor, 100Hz	50	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	90	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	35	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.95	%	Sim. to ISO 62
Density	1050	kg/m³	ISO 1183
Bulk density	600	kg/m³	-

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	230 - 260	°C	-
Mold temperature	60 - 80	°C	-
Injection speed	240	mm/s	-

Characteristics

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Processing

Injection Molding

Special Characteristics

Impact modified, Heat aging stabilized

Delivery form

Pellets