

INEOS Styrolution 4241

INEOS Styrolution 4241, with an HB flammability rating, is suitable for injection molding and extrusion molding processes. It is widely used in food packaging applications, housewares applications, extrusion and injection molding applications, as well as thermoforming sheet applications.

Physical property	Standard	Value	Unit
Density	ISO 1183	1.04	g/cm ³
Shrinkage	ISO 294	0.4 ~0.7	%
Water Absorption 23°C Saturation	ISO 62	0.07	%
Melt Index 200°C 5kg	ISO 1133	3.5	g/10min
Melt Index 200°C 5kg	ISO 1133	3.4	cm ³ /10min
Bulk Density Without external lubricant	INTERNAL METHOD	0.6	g/cm ³
Hardness	Standard	Value	Unit
Rockwell Hardness R(Scale)	ISO 2039	80	
Mechanical behavior	Standard	Value	Unit
Tensile Modulus	ISO 527	1900	MPa
Tensile Strength Yield 23°C	ISO 527	25	MPa
Elongation Flow Break	ISO 527	55	%
Flexural Strength 23°C	ISO 178	40	MPa
Flexural Modulus 23°C	ISO 178	2150	MPa
Izod Notch Impact 23°C Type A	ISO 180	11.5	kJ/m ²
Thermal	Standard	Value	Unit
HDT Unannealed 1.8MPa	ISO 75	70	°C
HDT Unannealed 0.45MPa	ISO 75	80	°C
Vicat Softening Temperature 50°C/hr 10N	ISO 306	95	°C
Vicat Softening Temperature 50°C/hr 50N	ISO 306	87	°C
CLE	ISO 11359	0.00091	cm/cm/°C
Service Temperature Maximum	INTERNAL METHOD	240	°C
Electrical properties	Standard	Value	Unit
Surface Resistivity	IEC 62631-3-1	1E+13	Ω
Dielectric Strength 1.5mm Short Time	IEC 60243	150	KV/mm
Flammability	Standard	Value	Unit
Flame Rating 1.5mm	UL94	HB	
Injection molding		Value	Unit
Dry Temperature		70	°C
Dry Time		2	hr
Shrinkage1		0.4~0.7	%