

INEOS Styrolution® 1050

Features: Crystalline、High heat resistance

Application: Fridge drawer、Diffusion plate、High temperature applications、Sheet、Extrusion applications、Foam extrusion molding application、Injection molding 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	0.04	%
Melt Index 200°C 5kg		ISO 1133	2.8	g/10min
Bulk Density With external lubricant		INTERNAL METHOD	0.6	g/cm ³
Hardness		Standard	Value	Unit
Rockwell Hardness L(Scale)		INTERNAL METHOD	70	
Mechanical behavior		Standard	Value	Unit
Tensile Modulus		ISO 527	2650	MPa
Tensile Strength Break 23°C		ISO 527	40	MPa
Elongation Flow Break		ISO 527	2.5	%
Flexural Strength 23°C		ISO 178	85	MPa
Flexural Modulus 23°C		ISO 178	2950	MPa
Izod Un-notch Impact 23°C		ISO 180	8.5	kJ/m ²
Optical performance		Standard	Value	Unit
Transmittance 550nm		ASTM D1003	90.2	%
Haze		ASTM D1003	0.4	%
Thermal		Standard	Value	Unit
Vicat Softening Temperature 50°C/hr 10N		ISO 306	100	°C
Vicat Softening Temperature 50°C/hr 50N		ISO 306	95	°C
CLE		ISO 11359	8.9E-5	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		Standard	Value	Unit
Dry Temperature			70	°C
Dry Time			2	hr
Shrinkage1			0.4~0.7	%