TotalEnergies

Refining & Chemicals
Polymers

Polystyrene Impact 8260

Technical data sheet
Improved Environmental Stress Crack Resistance
High Impact Polystyrene
Produced in Europe

Description

POLYSTYRENE IMPACT 8260 is an high impact polystyrene for extrusion and injection applications. This grade has an improved environmental stress crack resistance in comparison with standard high impact grades. The product has been specifically designed for the production of refrigerator part: inner liners, door liners, injected parts etc.

This grade is also proposed for the production of packaging intended for products likely to cause stress cracking e.g. fats, oil...

POLYSTYRENE IMPACT 8260 retains good mechanical properties at low temperatures making this grade suitable for frozen packaging; it also affords good printing performance.

The main applications are sheet for thermoforming, fridges liners, low temperature packaging applications (ice cream boxes and lids), packaging for aggressive foodstuffs, matt finish, soft touch.

Characteristics

	Method	Unit	Value
Rheological properties			
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	2.5
Thermal properties			
Vicat softening point 10N (T° increase = 50°C/h)	ISO 306A50	°C	99
Vicat softening point 50N (T° increase = 50°C/h)	ISO 306B50	°C	90
Coefficient of linear thermal expansion		mm/°C	9.10 E-5
Mechanical properties			
Notched Charpy impact strength	ISO 179/1eA	KJ/m²	14
Notched Izod impact strength	ISO 180/1A	kJ/m²	13
Tensile strength at yield	ISO 527-2	MPa	20
Tensile strength at break	ISO 527-2	MPa	25
Elongation at break	ISO 527-2	%	>55
Tensile modulus	ISO 527-2	MPa	1550
Flexural modulus	ISO 178	MPa	1650
Electrical properties			
Dielectric strength		kV/mm	150
Surface resistivity	ISO IEC 93	Ohms	>10 E+13
Miscellaneous			
Density	ISO 1183	g/cm³	1.04
Moulding shrinkage		%	0.4-0.7
Water absorption	ISO 62	%	<0.1

Polystyrene

TOTALENERGIES ONE TECH BELGIUM
Zone Industrielle C
B-7181 Feluy
Belgium

TotalEnergies

Refining & Chemicals
Polymers

General Information

- Standard properties: All tests carried out at 23°C unless otherwise stated. Mechanical properties are measured on injection moulded tests specimens.
- Bulk density: bulk density is approximately 0.6 g/cm3.

Handling and storage

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: www.polymers.totalenergies.com.