

## Description

POLYSTYRENE IMPACT 7240 is a very high impact polystyrene for the extrusion industry. This grade has been designed to be diluted with crystal polystyrene such as POLYSTYRENE CRYSTAL 1160, 1340, 1540 at high levels to obtain stiff and impact resistant sheet for thermoformed packaging.

## Applications

Dairy sheet for Form-Fill-Seal, individual dairy pots, multilayer sheets in dilution with crystal polystyrene, cups, food trays, eggs boxes, disposables.

## Properties

Rheological	Method	Unit	Value
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	4.5
<b>Thermal</b>			
Vicat softening point 10N (T° increase = 50°C/h)	ISO 306A50	°C	97
Vicat softening point 50N (T° increase = 50°C/h)	ISO 306B50	°C	87
HDT unannealed under 1.8 MPa	ISO 75-2A	°C	74
HDT annealed under 1.8 MPa	ISO 75-2A	°C	90
Coefficient of linear thermal expansion		mm/°C	9.10 E-5
<b>Mechanical</b>			
Notched Charpy impact strength	ISO 179/1eA	KJ/m <sup>2</sup>	11
Notched Izod impact strength	ISO 180/1A	kJ/m <sup>2</sup>	11
Tensile strength at yield	ISO 527-2	MPa	23
Tensile strength at break	ISO 527-2	MPa	21
Elongation at break	ISO 527-2	%	60
Tensile modulus	ISO 527-2	MPa	1950
Flexural modulus	ISO 178	MPa	1850
Rockwell hardness	ISO 2039-2		R 65
<b>Electrical</b>			
Dielectric strength		kV/mm	150
Surface resistivity	ISO IEC 93	Ohms	>10 E+13
<b>Miscellaneous</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.04
Moulding shrinkage		%	0.4-0.7
Water absorption	ISO 62	%	<0.1

## 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/cm<sup>3</sup>.
- Please refer to the Safety Data Sheet for further information.
- Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within six months after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: [www.totalrefiningchemicals.com](http://www.totalrefiningchemicals.com)

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within Total Refining & Chemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.

