


TotalEnergies

Refining & Chemicals
Polymers

POLYSTYRENE COMPOUND 4440

Technical data sheet – Issue 4
Compound Polystyrene
Produced in Europe

Description

POLYSTYRENE (PS) COMPOUND (CPD) 4440 is a high impact polystyrene for the injection moulding of parts demanding good dimensional stability at high temperatures, particularly boxes, frames, electronic devices. In addition, the flow properties of this grade make it particularly suitable for the moulding of large parts and for use with techniques such as gas injection.

Main characteristics

- ✓ High impact

Applications

Covers for electrical equipment. Office automation.

Properties

	Method	Unit	Typical Value (*)
Rheological properties			
Melt Flow Rate 230°C/2,16 kg	ISO 1133-D	g/10 min	10.0
Mechanical properties			
Flexural modulus	ISO 178	MPa	2000
Izod impact strength (notched) at 23°C	180/1A	kJ/m ²	10.0
Thermal properties			
Vicat Softening point A50 (10N, 50°C/h)	ISO 306	°C	88
Other physical properties			
Density (**)	ISO 1183	g/cm ³	< 1.13

(*) Data not intended for specifications purposes

(**) based on natural resin

Processing conditions

Maximum melt temperature is 260°C.

Under normal processing conditions, this grade is heat stable. However, do not leave in barrel when moulding machine is idle. Always purge with clean natural PS, PP or any propriety purging compound.

Ensure all fumes are extracted at source.

Speciality Compound

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General information

Standard properties: all tests carried out @ 23°C unless stated otherwise. Mechanical properties are measured on injection moulded specimens.

Bulk density: bulk density of all natural grades is approximately 0.6 g/cm³.

PS CPD 4440 should be kept in cool and dry place. Avoid direct exposure to sunlight.

Handling and storage

Please refer to the material safety data sheet (MSDS) 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 MSDS of our product.

MSDS may be obtained from the website: <https://polymers.totalenergies.com/>

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