Polystyrene

Technical data sheet Flame Retardant Polystyrene Produced in Europe

Description

POLYSTYRENE (PS) COMPOUNDS (CPDS) 801 is a high impact brominated flame retardant polystyrene for use in injection moulding and extrusion/thermoforming. PS CPDS 801 can be supplied in both natural and coloured forms.

Main Characteristics

- ✓ DBDPE free,
- ✓ Excellent UV stability,
- ✓ UL94 V0 @ 1.6 mm and UL94 5VB @ 2.5 mm.

Applications

Electrical equipment housings, TV covers, Office automation, housings for Potential Ignition Sources (PIS)

Properties

Flammability rating	Method	Unit	Value
UL 94 5VB – Non colored		mm	2.5
UL 94 V0 – All colors		mm	1.6
Rheological			
Melt Flow index (200°C-5Kg)	ISO 1133H	g/10mn	5
Thermal			
Vicat softening point 50N (T° increase of 50°C/h)	ISO 306B50	°C	87
Mechanical			
Izod notched impact strength at 23°C	180/1A	KJ/m²	8.0
Tensile yield strength	ISO 527-2	MPa	24
Tensile strength at break	ISO 527-2	MPa	19
Elongation at break	ISO 527-2	%	40
Flexural modulus	ISO 178	MPa	2300
Miscellaneous			
Density at 23°C	ISO 1183	g/cm³	< 1.13
Moulding shrinkage		%	0.4 - 0.7
Water absorption	ISO 62	%	<0.1
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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.

General information

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

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

