

# TOTAL PETROCHEMICALS

# POLYSTYRENE COMPOUND 853

Technical data sheet Flame Retardant Polystyrene Produced in Europe

### **Description**

POLYSTYRENE (PS) COMPOUNDS (CPDS) 853 is a high impact, high stiffness halogen free flame retardant polystyrene

### Main Characteristics

- ✓ Bromine and Chlorine free
- ✓ UL94 V2 @ 1.6 mm with very low combustion time
- ✓ Good flow and UV properties

#### **Applications**

Covers for electrical equipment. TV covers. Office automation.

# **Properties**

Flammability rating	Method	<u>Unit</u>	<u>Value</u>
UL 94 V2 – All colors		mm	1.6
Rheological			
Melt Flow index (200°C-5Kg)	ISO 1133H	g/10mn	5.0
Thermal			
Vicat softening point 50N (T° increase of 50°C/h)	ISO 306B50	°C	81
Mechanical			
Izod notched impact strength at 23°C	180/1A	KJ/m²	7.0
Tensile yield strength	ISO 527-2	MPa	32
Elongation at break	ISO 527-2	%	40
Flexural modulus	ISO 178	MPa	2500
Miscellaneous			
Density at 23°C	ISO 1183	g/cm³	1.06
Moulding shrinkage		%	0.4 - 0.7
Water absorption	ISO 62	%	<0.1
Processing conditions			

Maximum melt temperature is 300°C, though typically 250/280°C is used.

> 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.

