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## POLYSTYRENE COMPOUND 828H

Technical data sheet – Issue 4  
Flame retardant Polystyrene  
Produced in Europe

### Description

**POLYSTYRENE (PS) COMPOUND (CPD) 828H** is a high impact brominated flame retardant polystyrene for applications that required HGW performances.

**PS CPD 828H** can be supplied in both natural and coloured forms.

### Main characteristics

- ✓ HBCD free.
- ✓ Excellent UV stability.
- ✓ Hot Glow Wire (HGW) rated to 850°C (\*).
- ✓ High flow.
- ✓ Outstanding injectability.

### Applications

Fuses boxes, electrical housings.

### Properties

	Method	Unit	Typical Value
<b>Rheological properties</b>			
Melt Flow Rate 200°C / 5 kg	ISO 1133-D	g/10 min	15.0
<b>Flame retardant properties</b>			
Hot Glow Wire flammability index (*)	IEC 695-2-1	°C	850
<b>Mechanical properties</b>			
Flexural modulus	ISO 178	MPa	2200
Izod impact strength (notched) at 23°C	180/1A	kJ/m <sup>2</sup>	5.0
<b>Thermal properties</b>			
Vicat Softening point A50 (10N, 50°C/h)	ISO 306	°C	85
<b>Other physical properties</b>			
Density (**)	ISO 1183	g/cm <sup>3</sup>	< 1.13

(\*) HGW value measured on injected standard samples (thickness : 2 mm)

(\*\*) based on natural resin

### Processing conditions

This product is heat stable. We nevertheless recommend avoiding prolonged residence time in the molding machine.



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We recommend using a maximum melt temperature of 220°C.

If possible, use low shear screw profile, and check ring assembly.

Where possible, only use tools with cold runner system and chemically resistant tooling.

Always purge machine with natural PS or PP, or carefully selected purging agent when machine stops.

In case of use of hot runner systems in injection molds, it is recommended not to exceed 180°C.

### General information.

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

Bulk density: based on natural resin is approximately 0.6 g/cm<sup>3</sup>.

PS CPD 807H should be kept in a cool and dry place. Avoid direct exposure to sunlight.