

### Description

POLYSTYRENE (PS) COMPOUNDS (CPDS) 827 is a high impact flame retardant polystyrene for use in HGW applications. PS CPDS 827 can be supplied in both natural and colored forms.

### Main Characteristics

- ✓ DBDPE and Antimony Trioxide free
- ✓ Excellent UV stability
- ✓ Hot Glow Wire (HGW) rated to 750°C (IEC 695-2-1)
- ✓ High Flow

### Applications

Insulated enclosures. Junction boxes.

### Properties

<b>Flammability rating</b>	<b>Method</b>	<b>Unit</b>	<b>Value</b>
Hot Glow Wire	IEC 695-2-1	°C	<b>750</b>
<b>Rheological</b>			
Melt Flow index (200°C-5Kg)	ISO 1133H	g/10mn	<b>6.0</b>
<b>Thermal</b>			
Vicat softening point 50N (T° increase of 50°C/h)	ISO 306B50	°C	<b>90</b>
<b>Mechanical</b>			
Izod notched impact strength at 23°C	180/1A	KJ/m <sup>2</sup>	<b>7.0</b>
Tensile yield strength	ISO 527-2	MPa	<b>27</b>
Elongation at break	ISO 527-2	%	<b>39</b>
Flexural modulus	ISO 178	MPa	<b>2400</b>
<b>Miscellaneous</b>			
Density at 23°C	ISO 1183	g/cm <sup>3</sup>	<b>1.04</b>
Moulding shrinkage		%	<b>0.4 – 0.7</b>
Water absorption	ISO 62	%	<b>&lt;0.1</b>
<b>Processing conditions</b>			
<ul style="list-style-type: none"> <li>➤ Maximum melt temperature is 220°C.</li> <li>➤ This product is heat and shear sensitive. Avoid prolonged residence time in the moulding machine.</li> <li>➤ If possible, use low shear screw profile, and check ring assembly.</li> <li>➤ Where possible only use tools with cold runner systems.</li> <li>➤ Use chemically resistant tooling where possible.</li> <li>➤ Always purge machine into natural PS or PP, or propriety purging agent, when machine stops or finishes production.</li> </ul>			

### 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/cm<sup>3</sup>.
- Avoid direct exposure to sunlight, 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.totalpetrochemicals.biz](http://www.totalpetrochemicals.biz).
- Please check information on Material and safety Data Sheet before use.
- Please contact our technical office for more details.

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