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Refining & Chemicals
Polymers

POLYSTYRENE COMPOUND 818E

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

Description

POLYSTYRENE (PS) COMPOUND (CPD) 818E is a high impact brominated flame retardant polystyrene for applications that required HGW performances.
PS CPD 818E can be supplied in both natural and coloured forms.

Main characteristics

- ✓ UL 94 V0 @ 1.6 mm for black compounds and @ 2 mm for all other coloured compounds.

Applications

Covers for electrical equipment. Office automation.

Properties

	Method	Unit	Typical Value
Rheological properties			
Melt Flow Rate 200°C / 5 kg	ISO 1133-D	g/10 min	8.5
Flame retardant properties			
UL 94 black	UL 94 @ 1.6 mm		V0
UL 94 all colours	UL 94 @ 2 mm		V0
Mechanical properties			
Flexural modulus	ISO 178	MPa	2300
Izod impact strength (notched) at 23°C	180/1A	kJ/m ²	7.0
Thermal properties			
Vicat Softening point A50 (10N, 50°C/h)	ISO 306	°C	83
Other physical properties			
Density (**)	ISO 1183	g/cm ³	< 1.13

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

(**) 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 material in barrel when moulding machine is idle.
always purge with clean natural PS, PP or any property purging compound.
Ensure all fumes are extracted at source.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. These are typical values not to be construed as specification limits. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within TotalEnergies Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.

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Speciality Compound





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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/cm³.

PS CPD 818E should be kept in a cool and dry place. Avoid direct exposure to sunlight.

Handling and storage.

Please refer to the material safety datasheet (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/>

