



Refining & Chemicals
Polymers

POLYSTYRENE COMPOUND 9217

Technical Data Sheet
Compound Polystyrene / Polyethylene
Produced in Europe

Description

POLYSTYRENE (PS) COMPOUND (CPD) 9217 is a natural (non colored) PS modified with polyethylene. This combination gives a high level of stress crack resistance with excellent mechanical properties and a good abrasion and tear resistance.

PS CPD 9217 has similar mechanical properties as a PE but can be injected on a PS equipment.

Main Characteristics

- ✓ High impact
- ✓ High stress-crack resistance

Application

Packaging, Pipe coating, Electrical insulation, ...

Properties

Property	Method	Unit	Typical value (*)
Density (**)	ISO 1183	g/cm ³	1.02
Melt Flow Rate (200°C-5kg)	ISO 1133/D	g/10min	2.5
Izod notched impact strength (23°C / -30°C)	180/1A	kJ/m ²	40.0 / 20.0
Flexural modulus	ISO 178	MPa	1450
Vicat softening point 50N (50°C/hr)	ISO 306	°C	74
Tear resistance: force max. (parallel/perpendicular) (a)	ISO 34C	N	30 / 35
Stress cracking performance : loss of elongation (b)		%	0 - 5

(*) Data not intended for specification purposes

(**) Based on natural resin

(a) On 300 micron film, notched parallel or perpendicular to the extrusion direction.

(b) Test related to AGK31. Injection moulded samples, put under stress and exposed to sunflower oil for 50 minutes. The "loss of elongation" corresponds to the difference in elongation at break between an exposed and unexposed sample.

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.

PS CPD 9217 should be kept in cool and dry place. Avoid direct exposure to sunlight.

Handling and storage

Please refer to the material safety data sheet (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: <http://www.polymers.total.com/>

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Specialty Compound

