

## GPPS 1540

### GENERAL PURPOSE POLYSTYRENE

#### General Information :

GPPS 1540 is an easy flowing crystal polystyrene designed for extrusion or injection applications . In extrusion , it improves extruder output and thermoforming cycle time when mixed with a super high impact polystyrene such as HIPS 7240. It is particularly suitable for glossy-layer co-extrusion.

It does combine excellent fluidity with a softening point higher than GPPS 1810/1811 grade.

#### Applications :

*Extrusion* : Impact dilution; Gloss layer in co-extrusion; Anionic styrene butadiene copolymer dilution.

*Injection* : Packaging articles; Medical applications, e.g., petri dishes; Office equipment; Pen barrels; Crisper boxes for refrigerators; Cups.

#### Specification :

Property	Unit	Value	Test Method
MFI (200°C/5kg )	g/10 min	11	ASTM D 1238
Styrene Residual Monomer	PPM	<500	CLGLABPSG004(ATOFINATEST METHOD)
Vicat Softening Point	°C	Min89.5	ASTM D 1525
Rockwell Hardness	-	Scale   L70	ASTM D 785
Tensile Strength @ Yield	MPa	-	ASTM D 638
Tensile Strength @ Break	MPa	45	ASTM D 638
Elongation @ Break	%	2	ASTM D 638
Flexural Modulus	MPa	3000	ASTM D 790
Tensile Modulus	-	3100	ASTM D 638
Refractive Index	-	1.591	ISO Method
Water Absorption	%	<0.1	ASTM D 570

Density: 1.04gr/cm<sup>3</sup> (app.)

Approximate shrinkage in mould: 0.4-0.7% (ASTM D 955)

All tests are carried out at 23°C unless otherwise stated.

The above data are typical laboratory average, intended to serve as guides only.

#### Food Contact Properties :

GPPS 1540 is a food contact grade, unless the term “Non-FoodContact” is printed on the bags.

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#### **Processing Conditions :**

GPSS1540 can be processed under different conditions depending on machinery available and articles moulded.

During processing of GPSS1540 small quantities of styrene monomer may be released into the atmosphere.

At styrene concentrations of 50 up to 100 PPM (TLV value for styrene monomer), no negative effects on health are expected.

#### **Storage :**

GPSS1540 should be stored in dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration.

#### **Recycling & Environment :**

End products made from this polymer can be recycled , incinerated or disposed of in landfill without detriment to the environment. With recycling , clean waste can be re-used for many less demanded applications .

Alternatively , with properly controlled and efficient incineration , preferably linked to heat or other energy recovery system, polystyrene's high calorific value will assist the combustion of municipal solid waste .

In landfill sites GPSS1540 does not degrade to produce voids , and does not emit dangerous gases or contribute to ground water pollution

If pigments or other additives are incorporated into this product at the processing stage, the above statements may not be fully valid .

#### **Food Contact :**

The composition of products complies with the EC Directive 90/128/EEC for use in food contact applications.

#### **Packaging :**

This product is packed in 25 Kg PE bags.