

## Product Data Sheet

F100

Expandable Polystyrene, F/ Self-extinguishing grade

### Product Description

Polystyrene is one of petrochemical products widely used in various industries, which is produced through polymerisation of monomer styrene. Expandable polystyrene (EPS) is one type of this polymer characterised by its increase in volume when exposed to heat. This expandability is caused by uniform distribution of a hydrocarbon agent, like pentane, within EPS structure. Manufacturers can expand the beads inside moulds of different shapes to obtain a plastic object of the same shape. Consumption rate of raw material is much lower in this method, compared to other types of polymers and this makes the produced objects to be much lighter. The gas stored in constitutive cells of expanded polystyrene products places them among good insulators against cold, heat and sound. Very low density of the final product makes it much easier to be cut in totally customisable shapes, compared to other plastics.

Many advantages of EPS, including lower costs of application makes it popular in many industries such as construction, packaging, industrial and domestic equipments, decoration, etc.

### Applications:

- Insulation
- Big packing
- Products

No.	Property	Units	Value
1	Bead Size	mm	1.2 - 1.6
2	Pre-expansion Density	kgf/cm <sup>2</sup>	13
3	Foam Multiple	-	47-65
4	Foam Density	g/L	14-22
5	Polystyrene Content	%	93-94
6	Pentane Content	%	5-7
7	Flame Retardant	%	1( Max)
8	MV (*1000)	Aprx	250
9	Specific Gravity	-	1.03
10	Moisture Content	%	1(Max)
11	Foam Water Absorption	gr/m <sup>2</sup>	100(Max)
12	Foam Compressive Strength	kgf/cm <sup>2</sup>	0.5 (Min)

Standards: UL (HF1)