



Esin Plastic Co./ IRAN

GENERAL PURPOSE POLYSTYRENE

GPSS: GP-32N

Applications:

- Injection molding
- Disposable cups
- Blending with HIPS

Polystyrene GP-32N is a general purpose polystyrene resin with easy flow and good clarity. It is recommended for applications where a specific balance of flow and strength are important. In injection molding, GP-32N possesses low viscosity at high shear rate. It is particularly suitable for glossy-layer co-extrusion.

PROPERTY	UNIT	TEST METHOD	VALUE
Rheological:			
Melt Flow Index (200 °C - 5 kg)	GR/10MIN	ASTM D-1238	10
Thermal:			
VICAT Softening Point (10N)	°C	ASTM D-1525	95
Mechanical:			
Notched IZOD Impact Strength (23°C)	KJ/M2	ASTM D-256	1.5
Unnotched IZOD Impact Strength (23°C)	KJ/M2	ASTM D-256	8
Tensile Strength at Break	MPa	ASTM D-638	42
Elongation at Break	%	ASTM D-638	2.5
Tensile Modulus	MPa	ASTM D-638	2900
Miscellaneous:			
Water Absorption	%	ASTM D-570	≤0.09
Moulding Shrinkage	%	ASTM D-955	0.4-0.8
Density	g/cm ³	ASTM D-792	1.04

Recommended Injection Molding Parameters		
Units	Value	Barrel Temperature
°C	150 - 180	Zone 1
°C	160 - 200	Zone 2
°C	210 - 240	Zone 3
°C	210 - 250	Zone 4
°C	210 - 250	Nozzle
°C	40 - 60	mold

