

Expandable Polystyrene (EPS)

General Information:

Standard expandable polystyrene EPS is manufactured by the suspension polymerization method. The polymerization is generally carried out in a batch process. Various grades of EPS supplied in free-flowing beads contain pentane (CFC free) as a foaming agent. It is used for fast cycle low density block mold application with good surface finish.

Available Grades

TYPES	HIGH STRENGTH (HS)	FAST CYCLE (FC)	WATER PROOF (WP)	SPECIAL EXTRUSION (EX)
GRADE	121,221,321	323,422,522	326,426,526	600

Applications

Grades of each type differ only in bead size not in composition.

TYPE&GRADE	BEAD SIZE(MM)	TYPICAL END PRODUCT DENSITY (KG/M3)	TYPICAL APPLICATIONS
TPC - 121 HS	1.8 - 2.5	13 – 25	Low density blocks
TPC - 221 HS	1.0 – 1.8	14 – 30	Low – Medium density blocks
TPC - 321 HS	0.7 – 1.0	18 – 30	Shape molding with wall thickness > 10 mm, and medium – high density blocks
TPC - 323 FC	0.7 – 1.0	18 – 30	Faster cycling shape molding with wall thickness >10mm.&medium-high density blocks
TPC - 422 FC	0.5 – 0.7	20 – 35	Faster cycling shape molding of 6-10mm wall thickness suitable for high quality products
TPC - 522 FC	0.3 – 0.5	22 – 50	Very thin wall shape molding with wall thickness <6mm suitable for high quality products demanding improved surface finish and high strength
TPC - 600 EX	UP TO 0.3	----	Special type for extrusion
TPC - 326 WP	0.7 – 1.0	18 – 30	Low water absorption, longer cycling shape molding with wall thickness >10 mm
TPC - 426 WP	0.5 – 0.7	20 – 35	Very low water absorption, cycling shape molding of 6-10 mm wall thickness
TPC - 526 WP	0.3 – 0.5	22 – 50	Very thin-wall water proof shape molding products with wall thickness <6 mm such as drinking cups

Lower densities can be achieved by double pre expansion.

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