

## FC522

FC522 , is one of the TPC Performance expandable polystyrene products range. It is a free flowing expandable polystyrene grade,consisting of spherical polystyrene beads containing pentane as the expansion agent.

Expandable polystyrene (EPS) is normally expanded to achieve the low densities required for final step expansion.The typical density of this grade is around 25 kg/m<sup>3</sup>,but other densities are possible depending on applications and equipments.

FC522 is specially fast cycling and water proof formulated to achieve low density foam without lumps during pre-expansion.This grade is not fire retardent ,so it is not suitable for bulding applications.

### **Applications:**

High Density Block,Shape Molding

Because of its small bead size FC522 is also used for very thin wall shape molding with wall thickness less than 6 mm suitable for high quality products demanding improved surface finish and high strength. Properly processed EPS foam packaging made from FC522 provides good mould filling properties and high mechanical strength.

### **Packaging and storage:**

FC522 is shipped in octabins (height 176 cm) on wooden pallets (115cm x 115 cm), containing 1000 kg net of material.

The octabins are not weather- or water-proof and must therefore not be exposed to outdoor conditions.

In order to obtain the desired properties of FC522, the raw material should be stored below 20 °C and be processed within 1 month.

### **Processing:**

Preexpansion:

With discontinuously operating, state-of-the-art preexpanders FC522 can be preex-panded to densities of approx.25 kg/m<sup>3</sup>.

Lower densities can be achieved by double preexpansion or in optimized machines.

FC522 has been treated with an antistatic agent to prevent a buildup of electro-static charge during transport.

Intermediate aging:

Intermediate aging should be between 10 and 48 hours.

### **Moulding:**

FC522 can be processed in industry standard moulding machines within a relatively wide range of steaming settings.

If a regenerative agent is added care has to be taken that the density of the regenerative agent equals the preexpansion density as closely as possible to prevent a segregation during production.

### Typical Properties

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
BEAD SIZE	MM	SUNPOR 7.2.5 (MIN 90% BY WT)	(0.3-0.5)(>90%wt)
K-VALUE	—	SUNPOR 7.2.4	55
PENTANE CONTENT	WT%	SUNPOR 7.2.2	5.2%
BULK DENSITY	KG/M3	SUNPOR 7.2.3	22-30
RESIDUAL MONOMER	PPM	SUNPOR 7.2.1	500

\*: All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For taking more information about guaranteed items, please refer to S.S.S.(standard sales specifications)

Address: #2, 5th floor, No 769, Enghelab Ave., Tehran, Iran.

Telephone: +98-21-6646 9361

Fax: +98-21-6640 8216

Email : [sale@ibakpolymer.com](mailto:sale@ibakpolymer.com)

Web Site: [www.ibakpolymer.com](http://www.ibakpolymer.com)