

### **Product Data Sheet**

#### HS221

#### **EXPANDABLE POLYSTYRENE(EPS)**

### **Product Description**

HS221, 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 22 kg/m3, but other densities are possible depending on applications and equipments.

HS221 is specially high strength formulated to achieve low density foam without lumps during preexpansion. This grade is not fire retardent, so it is not suitable for building applications.

# Applications:

#### Medium Density Block

Low- and medium-density foam blocks made from HS 221 are used as thermal insulation boards for construction applications without special requirements concerning flame resistance or as packaging blanks.

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE	
BEAD SIZE	MM	SUNPOR 7.2.5 (MIN 90% BY WT)	(1-1.8)(>90%wt)	
K-VALUE	?	SUNPOR 7.2.4	55	
PENTANE CONTENT	WT%	SUNPOR 7.2.2	5.2%	
EXPANDED DENSITY	KG/M3	SUNPOR 7.2.6	14-30	
RESIDUAL MONOMER	PPM	SUNPOR 7.2.1	500	

<sup>\*</sup>All above mentioned data are typical values and not to be construed as real specifications. Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S. (Standard Sales Specifications)

# Packaging and storage:

HS221 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 HS221, 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 HS221 can be preex-panded to densities of approx. 22 kg/m3.

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

HS221 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:

HS221 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.



