



Eurocell® 100FP.1



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Technical Data Sheet

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Product Description:

Eurocell® 100FP.1 is an “Expandable Polystyrene” material in the shape of almost spherical beads, containing a flame retardant additive (HBCD Free) and pentane as a blowing agent.

Typical properties:

Bead Size Range (mm): 0,4 – 0,7

Sieve Analysis: 0,4 mm – 0,85 mm, min. 98 %

Bulk Density: ≈ 615 kg/m³

Application:

Eurocell® 100FP.1 is an EPS class with flame retardant, which can be produced in density ranges between 22 kg/m³ – 35 kg/m³ suitable for high quality block molding and shape molding with a section thickness of 10 mm and lower, ensuring rapid molding with its short cycle time.

Eurocell® 100FP.1 in general, due to legal and safety evaluations, is used for industrial packaging containing flame retardants, heat insulation and for the production of high density blocks, jamb and decorative mold panels, geofoam.

Packaging:

All Eurocell® products are packed in standard big-bag packages of 1125 kg or octagonal cardboard boxes (octabins-non stackable) of 1.125 kg. The content is protected by an inner sealed plastic liner placed between the product and the container.

Storage:

Eurocell® 100FP.1 should be stored in well-ventilated storage areas with temperatures preferably not exceeding 25°C. It should be protected against unsuitable weather conditions and direct sun light.

Partially used containers should be closed as tight as original conditions, paying attention to avoid any space between the raw material and lining, and should be consumed in a short time. In order to maintain the expansion potential, it is recommended to start the transformation within one month after delivery, if the package is not opened.

Processing:

Beads expansion to block or mold shaped products is managed with steam (water vapor). Eurocell® 100FP.1 can be expanded at densities between 22 kg/m³ – 35 kg/m³ in a single expansion. The minimum density achievable may vary depending on the expander type and process conditions.

The recommended intermediate aging time in silos is 12-30 hours depending on the density, the atmospheric and process conditions.

For any further request please contact our technical support department.

Safety and handling:

Please refer to the SDS prior to usage.

General information:

Eurocell® 100FP.1 should be kept away from sparks and flames during processing and storage. Adequate ventilation on floor level is also required during these phases. The grounding of the entire equipment and machinery is essential, in order to prevent static electricity on the conveying lines and during processing.

Safety precautions / measures are included in the “Safety Data Sheet” (SDS).

Regarding fire reaction, EPS products made of Eurocell® 100FP.1 (not mixed with other materials) and within a density range from 22 kg/m³ – 35 kg/m³ fulfill the requirements of class E according to EN 13501-1. (Certified by GSH Güteschutzgemeinschaft Hartschaum e.V)

Depending on the obtained density and atmospheric conditions, it should be considered that EPS products by Eurocell® 100FP.1 may contain pentane gases after processing and should be matured for sufficient time in order to ensure pentane’s removal. EPS flame retardant ability can be achieved only after pentane’s total elimination.

Eurocell® 100FP.1 is not permitted to be used in food contact applications.

Eurocell® 100FP.1 is produced in Aliaga, Türkiye.

grades	beads size (mm)	application denstiy (kg/m ³)	application	
			blocks	injection
flame retardant grades				
300FP.1	1.25 - 2.5	< 10*	+	-
200FPL.1	0.9 - 1.25	10* - 14	+	-
200FP.1	0.9 - 1.25	15-22	+	-
150FP.1	0.7 - 0.9	16-24	+	+
100FP.1	0.4 - 0.7	22-35	+	+
50FP.1	0.25 - 0.6	30-60	+	+

*multiple expansion