Monocell ®200FPL

Technical Data Sheet

Revision date: 07/11/2022

Product Description:

Monocell® 200FPL is an "Expandable Polystyrene" material in the shape of spherical beads, containing a flame retardant additive (HBCD free) and pentane as a blowing agent.

Typical Properties:

Bead Size Range (mm): 0,85 – 1,6
Sieve Analysis: 0,71 mm – 1,7 mm, min. 96%
Bulk Density: ≈ 615 kg/m^3

Application:

Monocell® 200FPL is a fast molding EPS flame retardant grade, from which blocks in the density range of 10* kg/m^3 – 18 kg/m^3 can be produced. Monocell® 200FPL is suitable for high quality block molding.

Packaging:

All Monocell® products are packed in standard big-bag packages of 1.100 or octagonal cardboard boxes (octabins) of 1.100 kg. The content is protected by an inner sealed plastic liner placed between the product and the container.

Storage:

Monocell® 200FPL should be stored in well-ventilated storage areas with temperatures not exceeding 25°C.
It should be protected against unsuitable weather conditions and direct sun light.
In order to maintain the expandability potential, it is recommended to proceed to conversion within one month after delivery.
Partially used containers should be closed as tight as in original condition, avoiding any free space between the raw material and lining and should be consumed in short time.

Processing:

Beads expansion to block or mold shaped products is managed with steam (water vapor).
Monocell® 200FPL can be expanded at densities between 10* kg/m^3 – 18 kg/m^3 in a single expansion or second expansion (*).
The minimum density achievable may vary depending on the expander type and process conditions.
The recommended temporary storage 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:

Monocell® 200FPL 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).
Depending on the obtained density and atmospheric conditions, it should be considered that EPS products by Monocell® 200FPL 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.
Monocell® 200FPL is not permitted to be used in food contact applications.
Monocell® 200FPL is produced in Inofyta, Greece.

grades nomenclature	beads size (mm)	Application			
		blocks	packaging > 20mm	packaging > 10mm	packaging < 10mm
regular grades					
200L	0,85 - 1,25	12* - 25			
200	0,85 - 1,25	13* - 30			
100	0,4 - 0,85	18 – 40			
100BL	0,4 - 0,85	19 – 40			
50	0,3 - 0,4				23 - 60
flame retardant grades					
300FP	1,6 - 2,24	9* - 15			
200FPL	**0,85 - 1,6**	**10* - 18**			
200FP	0,85 - 1,6	12* - 30			
100FPBL	0,4 - 0,85	19 – 30			
100FP	0,4 - 0,85	18 – 30			

*second expansion

(1) Regarding reaction to fire, EPS products made of Monocell® FP (not mixed with other materials) and within a density range from 10kg/m^3 -30kg/m^3 fulfill the requirements of class E according to EN 13501-1.

Monotez EPS solutions

www.monotez.com

Headquarters
115 Neratziotissis,
151 24 Marousi,
Athens, Greece
T +30 214 4008400
F +30 210 8161131

Plant
Industrial Zone,
320 11 Inofyta,
Viotia, Greece
T +30 2262031257
F +30 22620 31258