Sconapor® FP 438

Ravago EPS
Expands your life...

Technical Data Sheet

Issue date: 14/09/2018

Application:

Sconapor® FP 438 is a flame-retardant EPS grade suitable for the production thin-walled molded foam parts at densities from at densities from 20 kg/m³ to 30 kg/m³ with one continuous expansion.

Typical Properties:

Bead size range (mm): 0,4 – 0,7
Sieve analysis: 0,4 – 0,8 mm, min. 98 %
Bulk density: ≈ 600 kg/m³

Composition:

Sconapor® FP 438 (EPS) is manufactured as polystyrene homopolymer impregnated with a blowing agent (pentane), in the shape of almost spherical particles, and containing a flame retardant as additive.
Foams manufactured with these products are assigned to category B1 - flame-resistant building materials - as per DIN 4102.

Packaging:

Standard packaging is in 1.00-ton octagonal cardboard boxes (octabins).
The content is protected by an inner sealed plastic liner.

Storage:

Containers should be stored into well ventilated areas not exceeding 20°C and need to be protected from rain and direct sun rays.
Partly used containers must be closed as at the origin avoiding any free space between the raw material and the liner.
Proceed to conversion within one month after delivery to keep expandability potential.

Storage:

The low-boiling blowing agent enables the beads to expand up to 50-fold in volume (depending on the prefoaming density) with the application of saturated steam in the prefoaming process (first processing step).
After interim storage of the preexpanded beads (second processing step) they are fused in closed moulds by a further application of steam (third processing step).

Safety and handling:

Please refer to the MSDS prior to usage.

General information:

Sconapor® FP 438 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 Sconapor® FP (not mixed with other materials) and within a density range from 10 kg/m³ – 35 kg/m³ fulfill the requirements of class E according to EN 13501-1 and category B1 - flame-resistant building materials - as per DIN 4102.
Depending on the obtained density and atmospheric conditions, it should be considered that EPS products by Sconapor® FP 438 may contain pentane gas 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.
Sconapor® FP 438 is not suitable and not permitted to be used in food contact applications.
Sconapor® FP 438 is produced in Schkopau, Germany.

Grades nomenclature	Beads size (mm)	Application		
		Density (g/l)	Blocks	Molding
FP 138	1,6 - 2,5	10** - 25	x	
FP 238	1,0 - 1,6	15* - 28	x	
FP 338	0,7 - 1,0	17* - 30	x	x
FP 338S	0,7 - 1,0	20* - 35		x
FP 438	**0,4 - 0,7**	**20* - 30**	**x**	**x**
FP 438S	0,4 - 0,7	22* - 35		x

S: Special coating for shorter cycle times.
*: single expansion in batch/multiple expansions in continuous pre-expander.
**: multiple expansions.

Ravapor EPS solutions

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