



Technical Leaflet | September 2016

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Peripor® E Series

Application

For the production of moldings primarily in the high bulk density range for applications involving stresses due to compression and moisture.

Fire characteristics in conformity with:
– DIN 4102 – B1 (flame-retardant)
– EN ISO 13501-1-E

Product description

Expandable polystyrene (EPS) containing uniformly distributed polymeric flame retardant (blowing agent: pentane).

For additional information pertaining to the fire behavior please contact the local BASF representative.

Form as supplied

Peripor® E is supplied in the form of rounded particles.

Storage

Peripor® E should always be stored in a cool place, i. e. at temperatures up to a maximum of 20°C, to keep blowing agent losses low. Peripor is normally supplied in cardboard containers. It can be stored in the unopened original receptacles for 2 months respectively before processing.

The receptacles must be protected against the effects of weather (rain, snow, frost, sun) and against damage.

The contents of open receptacles should be processed quickly. The containers are to be kept well sealed in the meantime.

Product	Bead size range	Sieve analysis	
Peripor® 200 E	1.0 - 2.3mm	> 2.5mm	max. 2%
		0.8 - 2.0mm	min. 94%
		< 0.8mm	max. 4%
Peripor® 300 E	0.7 - 1.0mm	> 1.1mm	max. 5%
		0.4 - 1.1mm	min. 92%
		< 0.5mm	max. 3%

Product	Normal bulk density range	Recommended intermediate aging time
Peripor® 200 E	25 - 35 kg/m ³	10 - 48 h
Peripor® 300 E	25 - 35 kg/m ³	10 - 48 h

Processing

In order to conform with the Fire Test Certification, materials from different Suppliers should not be mixed.

Peripor® E products are converted to expanded foam in 3 stages.

Pre-expansion and intermediate aging

For Peripor® E products we do recommend to use discontinuous preexpander equipment.

The intermediate aging time should be selected in dependence on the bulk density, the ambient temperature and the intended application.

Final expansion

Peripor® E products are foamed out to expanded foam in commercial block molds or automatic molding machines. Moldings can be manufactured at relatively high mold temperatures with short cycle times and low specific steam consumption. Good mold-filling can be achieved even in the case of complicated molds.

Special characteristics:

Low-pentane products for the production of expanded foams with low aftershrinkage. Moldings of Peripor® E are not suitable for use in direct contact with foodstuffs.

Safety notes

It is to be noted that flammable mixtures of blowing agent (pentane) and air can arise in the storage and processing of Peripor® E and of the expanded foams manufactured from it due to the diffusion of blowing agent. All conceivable sources of ignition must therefore be kept away (naked flames, welding sparks, electric sparks, avoidance of electrostatic charging). A ban on smoking must be strictly observed!

Information about the safety precautions necessary in processing may be obtained from the brochure "Fire safety during processing". In addition, the "Richtlinien für die Vermeidung von Zündgefahren infolge elektrostatischer Aufladungen" (Guidelines for the avoidance of fire hazards as a result of electrostatic charges), BG Chemie, 7th Edition, 2004, are to be observed.

The contents of open receptacles should be processed quickly. The containers are to be kept well sealed in the meantime.

The transportation of Peripor® E or of expanded foams freshly made from it in unventilated or closed means of conveyance is not permitted.

Further information regarding transports is given in the respective Technical Information bulletin.

Biological action

Pentane escapes during the storage and processing of Peripor® E. Care is to be taken, especially when cutting the expanded foams with heated wires, to ensure the resultant vapours are removed by suction since, in addition to pentane, they also contain small amounts of styrene.

The maximum allowable concentration values for styrene and pentane are to be observed.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.