

Technical Leaflet | March 2016

® = registered trademark of BASF SE

Styropor® P 226 C

Application

For the production of expanded foam blocks and thick-walled molded parts with short cycle times.

Product description

Expandable polystyrene (EPS)
(blowing agent: pentane).

Form as supplied

Styropor® P 226 C is supplied in the form of rounded particles.

Bead size range:	0.9-1.3mm
Sieveanalysis:	> 1.4 mm max. 1%
	0.7-1.4 mm min. 98%
	< 0.7 mm max. 1%

Storage

Styropor® P 226 C should always be stored in a cool place, i.e. at temperatures up to a maximum of 20 °C. Styropor® is normally supplied in cardboard containers. It can be stored in the unopened original receptacles for one month respectively before processing.

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

Processing

Styropor® P 226 C is converted to expanded foam in 3 stages.

Preexpansion:

The lowest achievable bulk density depends on the type and mode of operation of the preexpansion equipment. The bulk density range of around 15kg/m³ usual for further processing to form blockware and form moldings is reliably controlled in technically sound, discontinuously operating installations. The preexpanded material has good free-flow properties and can be conveyed pneumatically without problem.

Intermediate aging:

For the usual bulk densities of 15 to 30kg/m³ we recommend intermediate aging times of 10 to 24 hours.

Final expansion:

Styropor® P 226 C is foamed out to expanded foam in commercial block molds. Blockware and Moldings can be produced at relatively high mold temperatures and low specific steam consumption.

Safety notes

It is to be noted that in the storage and processing of Styropor® and of the expanded foams manufactured from it, ignitable mixtures of blowing agent (pentane) and air can arise due to blowing agent diffusing out and therefore all conceivable sources of ignition are to be kept away (naked flames, welding sparks, electric sparks, avoidance of electrostatic charging). A ban on smoking is to be observed without fail!

Information about the safety precautions necessary in processing may be obtained from the brochure "Fire safety during processing". Moreover 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 containers should be processed quickly. At other times the containers are to be kept well sealed.

The transportation of Styropor® or of expanded foams freshly made from it, in unventilated or closed means of conveyance is not permissible.

Further information is included in the respective product safety leaflet.

Biological action

During the storage and in the processing of Styropor® pentane escapes.

Especially when cutting the expanded foams with heated wires care is to be taken to remove the vapors arising by suction, since apart from pentane they still contain small amounts of styrene.

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

Expanded foams made from Styropor® have been manufactured and processed for several decades. In this time no effects harmful to health whatsoever have been ascertained.

Food legislation

For additional information pertaining to the food legislation please contact the local BASF representative.

Note

The information in this publication is based on our current knowledge and experience. This information does not relieve processors of the need to carry out their own tests and trials due to the profusion of possible effects when processing and applying our products. No legally binding assurance of certain properties or of suitability for a specific purpose can be inferred from our information. Recipients of our products are themselves responsible for observing any proprietary rights and existing laws and regulations.