Technical Leaflet S-2 P-340C H

May 2013

Styropor® expandable polystyrene

P-340C H Product

Products and their uses

Styropor P-340C H non-modified product can be used in a wide variety of shape molding applications, typically 1.0 lbs/ft³ density with excellent fusion and short cycle time. Protective packaging – leak resistant applications such as coolers not requiring modified material.

Styropor P-340C H product is compatible with many anti-stat, mineral oil and color additives added during processing. P-340C H product does not contain chlorofluorocarbons or flame retardants.



Regular non-modified expandable polystyrene (EPS) containing approximately 5.2 – 5.8 wt.% pentane as the blowing agent. The P-340C H is supplied as spherical beads with a bulk density of approximately 40 lbs/ft³ (640 kg/m³).

Product Specifications		
Bead Size (mm)	Application	Pre-puff Age
		(dependent on density)
	General Packaging,	
0.60 - 1.25	Shape	4 to 24 hours

Typical expanded density range*

1.0 - 3.0 lbs/ft³ (16 - 48 g/L)

*(Typical densities are first and/or double pass pre-expansion. Results depend on equipment type and processing conditions.)

Processing

Polystyrene foam made from Styropor P-340C H product is produced in three stages: Pre-expansion, intermediate aging and molding. Full details are given in the brochure *Processing Styropor*.

Pre-expansion

The minimum density achievable depends on the pre-expansion equipment and technique used. With Styropor P-340C H products, batch expanders are recommended to obtain bulk densities shown above. Pre-expander pressures range from 0.15 – 0.35. Care should be taken during expansion, as prolonged steam times will result in excessive loss of pentane and ultimate difficulty in achieving acceptable fusion during molding. In continuous expanders, Styropor P-340C H product may achieve densities of 1.15 lbs/ft³ or lower, depending on equipment and conditions.

Intermediate aging

The minimum recommended pre-puff intermediate aging period for low density shape molding of this product is four (4) hours depending on density, ambient temperature and part thickness. Care should be taken when aging in excess of twenty-four (24) hours. Steam pressures and steam time may increase in order to obtain acceptable or quality moldings.

Molding

This product is intended for molding on automatic molding machines. Molding can be accomplished under a wide range of conditions and densities.



Packaging and storage

Styropor P-340C H product is packaged in Flexible Intermediate Bulk Containers of 1,763 lbs. (800 kgs). Plastic liners are used to maintain product shelf life by retaining the blowing agent.

Styropor products should be stored indoors in a cool place (maximum temperature 80°F). In the unopened bulk containers, the typical shelf life after receipt is 30-60 days. The containers should be protected from rain, snow, frost, direct sunlight and mechanical damage.

<u>Safety</u>

Styropor products and the finished foam products should not be exposed to ignition sources (including open flame, sparks, or electrostatic discharges) during storage, processing, shipment and application. Adequate ventilation in all processing areas must be provided to prevent hazardous accumulations of hydrocarbon vapors. For complete safety precautions and recommendations, refer to the Styropor bulletin S-6 Fire Safety Precautions in Styropor Processing Plants and appropriate Material Safety Data Sheets.

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