



Table 2: Product Technical Specifications

Products	Pentane, %	Monomer Resid, ppm	Size Range, mm	
Biopek® MXP240	5.2 – 5.8	< 1000 ppm	0.85-1.70	96% min
Biopek® MXP340	5.2 – 5.8	< 1000 ppm	0.60 – 1.18	97% min
Biopek® MXP440	5.2 – 5.8	< 1000 ppm	0.355 – 0.85 <0.355	97.0% min 2.0% max
Biopek® MXP540	5.2 – 5.8	< 1000 ppm	0.30 – 0.50 <0.30	96.0% min 3.0% max



### Pre-expansion

The minimum achievable density depends on the type of pre-expander and the technique used.

For proper processing, Biopek®MXP products should be processed in batch-type pre-expanders and can reach the densities shown in Table 3. In continuous pre-expanders, Biopek®MXP can be processed at densities greater than 28 kg/m<sup>3</sup> (1.75 lb/ft<sup>3</sup>).

TABLE 3 Typical densities

Products	Typical Density Range
Biopek® MXP240	16 - 40 kg/m <sup>3</sup> - (1.00 – 2.50 lb/ft <sup>3</sup> )
Biopek® MXP340	16 – 32 kg/m <sup>3</sup> - (1.00 – 2.00 lb/ft <sup>3</sup> )
Biopek® MXP440	20 – 40 kg/m <sup>3</sup> - (1.25 – 2.5 lb/ft <sup>3</sup> )
Biopek® MXP540	30 – 80 kg/m <sup>3</sup> - (1.87 – 5.00 lb/ft <sup>3</sup> )

lb/ft<sup>3</sup> = pound per cubic foot = pcf

The working vapor pressure in the pre-expander can be from 0.25 - 0.50 bar. Care should be taken during pre-expansion, as prolonged steam times can result in excessive pentane losses and difficulties in achieving adequate melts in the molding.

### Intermediate Storage

The recommended minimum intermediate storage time for these products is 2 hrs. depending on the density, temperature of the environment. Caution should be exercised when exceeding 24 hrs. as molding conditions can increase steam times and pressures to obtain acceptable melts.

### Molding

These products are designed for molding in automatic and manual machines, with or without vacuum. Molding can be achieved under a wide variety of conditions and densities. Molding vapor pressures are typically higher than that of regular pentane-containing Styropek® products.

### Safety Measure

It should be taken into consideration that during storage and processing of Biopek® MXP, flammable/explosive mixtures may be formed by the blowing agent (pentane), which migrates from the material. Therefore, all possible forms of ignition should be avoided (flames, sparks, electric shocks, static electricity build-up, etc.).

Adequate ventilation should be provided in all process areas to prevent the accumulation of pentane vapors.

For more safety information, please review the Safety Data Sheets (SDS) and the Technical Manual.

### Biological Effects

None of its components is soluble in water. Biopek® MXP is a recyclable material, but please note that many jurisdictions prohibit the use of unqualified recycling claims if there is not an established program that actually collects, separates or otherwise recovers a product or package from the waste stream where the product or package is sold.

Our claim is limited to the technical capability of our material to be recycled and does not apply to any final package or products. Customers must develop their own substantiation to support any recyclability or other environmental performance claims made for their entire product.

Subject to applicable local laws and regulations, expanded Biopek® MXP generally may be disposed of as non-hazardous waste.

### Biodegradability

This Biopek® MXP sample was tested using ASTM D5511 and demonstrated enhanced biodegradation of 16.5% in 229 days as compared 0.3% biodegradation of standard EPS sample. \*

\*Test conducted under laboratory conditions not necessarily reflective of actual product configurations or landfill conditions. California, Maryland, and Washington prohibit the sale of plastic packaging and plastic products that imply in any way that the item will break down, biodegrade, or decompose in a landfill or other environment.

For more detailed information regarding enhanced biodegradability of Biopek®, please refer to: [www.styropek.com](http://www.styropek.com)

### Chemical Effects

The resistance of Biopek®MXP to chemicals and solvents can be found in the Technical Manual. Prolonged exposure to ultraviolet light causes the foamed material to turn yellowish and the surface to become brittle.

### REMARKS

**IMPORTANT:** The information contained in this publication is based on generally accepted technical procedures and on experience acquired by STYROPEK, S.A. DE C.V. and its technologists. Each transformer shall perform its own tests considering the specific factors of handling, processing, and application of Styropek®, and STYROPEK S.A. DE C.V. shall not be held responsible. of the variation of the materials used in each particular process. Likewise, it is the obligation of all those to whom STYROPEK S.A. DE C.V. supplies. with its products, to respect the industrial property rights of which STYROPEK S.A. DE C.V. is the owner.

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