

Hollow but strong – new blow moulding Ultraform (POM)

Advantages

- Improved chemical resistance over PP (eg. Xylene)
- Improved barrier properties,
- Suitable for thin-walled mouldings

Applications

- Hairspray bottles
- Paint cans
- Oil tanks

BASF have introduced Ultraform® E3120 BM, this grade means that hollow objects with demanding requirements can now be made of polyoxymethylene (POM). They can be produced by means of extrusion blow moulding. In comparison to containers made of polyethylene(PE), they display considerable better barrier properties against gases such as oxygen, hydrogen and carbon dioxide. Ultraform E3120 BM is resistant to many types of media such as alcohol, oil and hydrocarbons, and moreover, it can be sterilized with hot steam.

Due to the optimized crystallization behavior the material offers a wide processing window, so that the blow moulding process can be cost-efficiently automated. The high stretchability of the plastic melt gives access to applications with thin-walled sections.



Information and images from BASF Press Release

Material	Resistance to Xylene	
	Temperature	Resistance
Ultraform	100	+
Ultraform	RT	+
LDPE	60	-
LDPE	20	0
HDPE	60	-
HDPE	20	0
PP	RT	0/_

+ Resistance 0 Limited resistance - No resistance

Since this translucent material accurately replicates the mold surfaces and is easy to colour. The moulding and chemical resistance properties mean this can be used in many different applications. Examples of these applications are, bottles for nail polish removers and other cosmetics, cans for solvents and paints, tanks for coolants and brake fluids as well as pressurized containers such as spray cans. Another option would be to add barrier layers to co-extruded films. The hollow objects made of the new POM grade are cost-effective to manufacture and actually weigh less than containers made of metal or glass.

Ultraform can be used to manufacture technical parts such as gear wheels, ball bearings or clips, also fuel pumps, loudspeaker grills, parts for toys as well as the brewing units of many commercially available coffee machines. For additional information about the highperformance plastics belonging to the BASF's Ultraform® brand please contact us.