

Product description

Elastomer-modified injection molding grade with high impact strength for clips, snap and fastening elements, and also for components subject to impact stress.

Abbreviated designation according to ISO 1043-1: POM-HI
Designation according to ISO 29988-POM-K,,M-GCPR,2-1

Physical form and storage

Ultraform® is supplied in the form of granules having a bulk density of approx. 850 g/l. Standard packs are 25 kg PE bag and 800 kg Octabin (octagonal container). Ultraform® is not subject to change when it is stored in dry, ventilated rooms. After relatively long storage (>1 year) or when handling material from previously opened containers, preliminary drying is recommended in order to remove any moisture which has been absorbed.

Product safety

If Ultraform® is processed properly little or no formaldehyde occurs in the region of the processing machine. Measures should be taken to ensure ventilation and venting of the work area, preferably by means of an extraction hood over the barrel unit.

Ultraform® decomposes when subjected to excessive heat. The decomposition products formed in this case consist almost exclusively of formaldehyde, a gas which has a pungent smell even at very low concentrations and irritates the mucous membranes. Decomposition can rapidly result in the build-up of a high gas pressure in the barrel of the processing unit. If the die is sealed there may be a sudden release of pressure via the filling hopper.

Contamination of Ultraform® by thermoplastics that cause decomposition of polyacetals, e.g. PVC or plastics containing halogenated fire protection agents, must be avoided under all circumstances. Even small quantities can cause uncontrolled and rapid decomposition of Ultraform® during processing.

If processing with color masterbatches or functional batches is intended, the compatibility of the components must be established by suitable trials. Processing with incompatible masterbatches may result in decomposition and release of gaseous formaldehyde.

Pellets and finished parts must not be allowed to come into contact with strong acids especially concentrated hydrochloric acid) since they cause Ultraform® to decompose. Detailed safety and environmental information are contained in the Ultraform® brochure and the material safety data sheet. Both are available from the PlasticsPortal, www.plasticsportal.net, or the NAInfopoint under phone +1-734-324-5150 or e-mail Infopoint.NorthAmerica@basf.com.

Note

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Processing Data Sheet

	Test method	Unit	Values
Properties			
Polymer abbreviation	-	-	POM + PUR
Density	ISO 1183	kg/m ³	1358
MFR at 190 °C and 2.16 kg	ISO 1133	g/10min	6.3
Drying			
Moisture, max.	-	%	0.2
Dryer temperature ¹⁾	-	°C	100
Drying time	-	h	3
Injection molding			
Melt temperature range	-	°C	190 - 215
Melt temperature, optimal	-	°C	200
Mold temperature range	-	°C	60 - 80
Mold temperature, optimal	-	°C	60
Residence time, max.	-	min	10
Machine Settings			
Temperature hopper throat	-	°C	80
Cylinder temperature 1 (feed zone)	-	°C	200
Cylinder temperature 2 (compression)	-	°C	200
Cylinder temperature 3 (metering-zone, in front of the screw)	-	°C	200
Cylinder temperature 4 (nozzle)	-	°C	200
Peripheral screw speed	-	m/s	0.3
Shrinkage			
Molding shrinkage (parallel)	ISO 294-4	%	1.60
Molding shrinkage (normal)	ISO 294-4	%	1.60

Footnotes

1) The granules or pellets in their original packaging can generally be processed without any special preliminary treatment. However, granules or pellets which have become moist due to prolonged or incorrect storage must be dried in suitable dryers, e.g. dehumidifying dryers.