Product Information **Ultraform®**

N2640 Z2 AT BK 140

03/2026

POM + PUR

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,3-1

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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Product Information

We create chemistry

Typical values for uncoloured product at 23 °C[1)]	Test method	Unit	Values[2)]
Properties			
Polymer abbreviation	-	-	**POM + PUR**
Density	ISO 1183	kg/m³	**1380**
Water absorption, equilibrium in water at 23°C	similar to ISO 62	%	**1**
Moisture absorption, equilibrium 23°C/50% r.h.	similar to ISO 62	%	**0.25**
Processing			
Processing: Injection moulding (M), Extrusion (E), Blow moulding (B)	-	-	**M**
Melting temperature, DSC	ISO 11357-1/-3	°C	**167**
MFR at 190 °C and 2.16 kg	ISO 1133	g/10min	**7.3**
Melt temperature, injection moulding	-	°C	**190 - 215**
Mould temperature, injection moulding	-	°C	**60 - 80**
Molding shrinkage (parallel)	ISO 294-4	%	**1.70**
Molding shrinkage (normal)	ISO 294-4	%	**1.70**
Flammability			
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	class	**HB**
Automotive materials (thickness d >= 1mm) [3)]	ISO 3795, FMVSS 302	-	**+**
Mechanical properties			
Tensile modulus	ISO 527-1/-2	MPa	**2050**
Yield stress, 50 mm/min	ISO 527-1/-2	MPa	**51**
Yield strain, 50 mm/min	ISO 527-1/-2	%	**12**
Nominal strain at break, 50 mm/min	ISO 527-1/-2	%	**37**
Flexural modulus	ISO 178	MPa	**2050**
Flexural stress at 3.5 % strain	ISO 178	MPa	**54**
Charpy unnotched impact strength (23°C)	ISO 179/1eU	kJ/m²	**NC**
Charpy notched impact strength (23°C)	ISO 179/1eA	kJ/m²	**13**
Charpy notched impact strength (-30°C)	ISO 179/1eA	kJ/m²	**7**
Izod notched impact strength (23°C)	ISO 180/A	kJ/m²	**12.5**
Ball indentation hardness at 358 N and 30 s	ISO 2039-1	MPa	**105**
Thermal properties			
HDT A (1.80 MPa)	ISO 75-1/-2	°C	**82**
Max. service temperature (short cycle operation)	-	°C	**100**
Coefficient of linear thermal expansion, longitudinal (23-55)°C	ISO 11359-1/-2	E-6/K	**130**
Electrical properties			
Relative permittivity (1 MHz)	IEC 62631-2-1	-	**4**
Dissipation factor (1 MHz)	IEC 62631-2-1	E-4	**140**
Volume resistivity	IEC 62631-3-1	Ohm*m	**1E10**
Surface resistivity	IEC 62631-3-2	Ohm	**1E14**
Electric strength K20/P50	IEC 60243-1	kV/mm	**85**
Comparative tracking index, CTI, test liquid A	IEC 60112	-	**600**

Footnotes
1) If product name or properties don't state otherwise.
2) The asterisk symbol '*' signifies inapplicable properties.
3) + = passed

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