Technical Data Sheet

Moplen HP456K

Polypropylene, Homopolymer

Product Description

Moplen HP456K is a polypropylene homopolymer used for extrusion and thermoforming applications. Moplen HP456K is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes and tapes.
The grade is being in development, this is a preliminary datasheet subjected to changes after product industrialization

Regulatory Status

This grade is not intended for medical and pharmaceutical applications.

Status	Developmental
Availability	Africa-Middle East; Europe
Application	General Sheet Extrusion; Intermediate Bulk Containers; Raffia/Tapes/Strapping
Market	Compounding; Flexible Packaging; Industrial Packaging; Rigid Packaging; Textile
Processing Method	Compounding; Extrusion Flat-die; Tapes & Raffia; Thermoforming
Attribute	Homopolymer

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	4.5	g/10 min	ISO 1133-1
Density	0.900	g/cm³	ISO 1183-1
Mechanical			
Flexural Modulus	1450	N/mm²	ISO 178
Tensile Modulus	1500	MPa	ISO 527-1, -2
Tensile Stress at Break, (23 °C, 50 mm/min)	16.4	N/mm²	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	34.5	N/mm²	ISO 527-1, -2
Tensile Strain at Break, (23 °C, 50 mm/min)	73	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	9.2	%	ISO 527-1, -2
Thermal			
Vicat Softening Temperature, (A50)	156	°C	ISO 306
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	83	°C	ISO 75B-1, -2

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

These are typical property values not to be construed as specification limits.

Conveying:

Conveying equipment should be designed to prevent production and accumulation of fines and dust particles that are contained in polymer resins. These particles can under certain conditions pose an explosion hazard. Conveying systems should be grounded, equipped with adequate filters and regularly inspected for leaks.

Storage:

The resin is packed in 25 kg bags, octabins or bulk containers protecting it from contamination. If it is stored under certain conditions, i. e. if there are large fluctuations in ambient temperature and the atmospheric humidity is high, moisture may condense inside the packaging. Under these circumstances, it is recommended to dry the resin before use. Unfavorable storage conditions may also intensify the resin's slight characteristic odor.

Resin should be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Higher storage temperatures may reduce the storage time.

The information submitted is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. This information does not remove the obligation of the customer to inspect the material on arrival and notify us of any faults immediately. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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