



HKR102

Previous grade number
1102K

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Information

Polymer Technology Centre
P O Box 72
Modderfontein 1645
South Africa

Tel: +27 (0) 11 458 0702
Fax: +27 (0) 11 458 0710

Polypropylene sales

Polypropylene Business
P O Box 2525
Randburg 2125
South Africa

Tel: +27 (0) 11 790 1432
Fax: +27 (0) 11 790 1079

www.sasol.com/polymers

**Sasol Polymers
Polypropylene Business**

MFI 3.5g/10 min

Sasol Polymers PP HKR102

is a medium flow polypropylene homopolymer. It is formulated with a high processing stabilisation package and displays low water carry over during the extrusion process.

Sasol Polymers PP HKQ102

is specially selected for a narrow MFI range (MFI 3.0g/10min)

Injection moulding:

Suitable for injection moulding of high strength technical articles which require superior mechanical properties such as:

- Automotive components
- Industrial components
- Household and domestic articles

Extrusion:

Sasol Polymers PP HKR102 is particularly suitable for the industrial fabric market where it is utilised to produce, under optimised processing conditions, tape with ideal tensile properties for weaving of industrial fabrics.

Typical applications are:

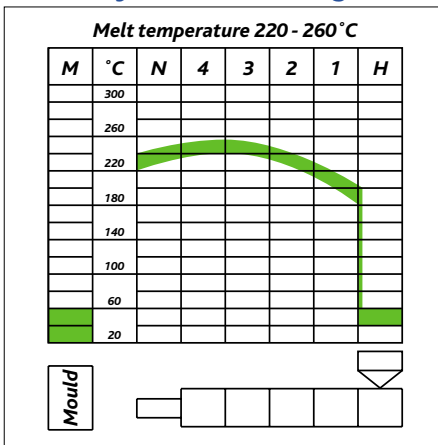
- Carpet backing
- Sacks and bags
- Flexible intermediate bulk containers (FIBC'S)
- Mining applications

Other applications are:

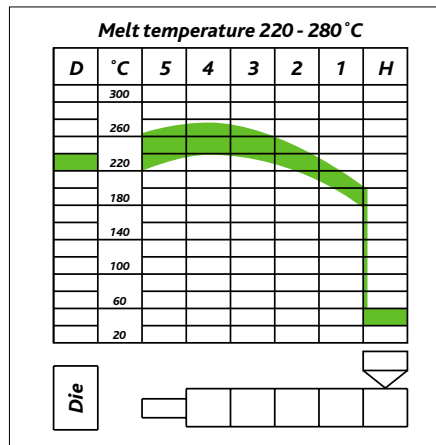
- Package strapping
- Monofilaments

Typical processing temperatures

Injection moulding



Extrusion



Cooling water (Chill roll) 15-30°C
Cooling water (Water bath) 15-40°C
Cooling water (Monofilaments) 60°C

Sasol Polymers PP HKR102
(previously 1102K)

Typical values at 23°C for uncoloured products

	Value	Unit	Test method	
			ISO	DIN
Physical properties				
Mass density	0.91	g/cm ³	1183	53479A
Melting point DSC	163	°C	3146	–
Melt flow index MFI 230/2.16	3.5	g/10min	1133	53735
Mechanical properties				
Tensile strength at yield (50mm/min)	36	MPa	527	53455
Elongation at yield (50mm/min)	9.5	%	527	53455
Ultimate elongation (50mm/min)	>50	%	527	53455
Modulus of elasticity in tension (1mm/min)	1550	MPa	527	53457
Izod notched impact resistance 23°C	4.0	kJ/m ²	180/1A	–
Charpy impact resistance 23°C	190	kJ/m ²	179/1eU	53453
Charpy impact resistance 0°C	110	kJ/m ²	179/1eU	53453
Charpy impact resistance -20°C	16	kJ/m ²	179/1eU	53453
Ball indentation hardness H 358/30	72	MPa	2039-1	–
Shrinkage	1.5	%	*	*
Thermal properties				
Heat distortion temperature HDT/A (1.8 MPa)	55	°C	75	53461
Heat distortion temperature HDT/B (0.45 MPa)	85	°C	75	53461
Vicat softening point A/120 10N	155	°C	306	–

* Sasol Polymers method