



# Polypropylene

## Aramco PP HP40G

### Product Description

Aramco PP HP40G is a homopolymer polypropylene resin and is typically used for yarn extrusion. Yarn made from this resin typically exhibits high denier strength, high anti splitting and low heat shrinkage.

### Typical Applications

Woven sacks, woven cloths, monofilament, binding tape, thermoforming.

This product is not intended for use in medical and pharmaceutical applications.

Physical Properties	Unit	Test Method	Value <sup>(1)</sup>
Melt Flow Index (190°C/2.16kg)	g/10min	ASTM D1238	4.0
Density	g/cm <sup>3</sup>	ASTM D792 Method A	0.9
<b>Mechanical Properties<sup>(2)</sup></b>			
Tensile Strength at Yield	MPa	ASTM D638	32
Tensile Elongation at Yield	%	ASTM D638	9
Tensile Strength at Break	MPa	ASTM D638	18
Tensile Elongation at Break	%	ASTM D638	110
Flexural Modulus	MPa	ASTM D790	1300
Izod Impact, Notched 23 °C	kJ/m <sup>2</sup>	ASTM D256	3.0
Hardness Rockwell		ASTM D785	99
<b>Thermal Properties<sup>(2)</sup></b>			
Vicat Softening Temperature @10N	°C	ASTM D1525	152

(1) Typical values only, not to be construed as specification limits

(2) Test specimen preparation method : Pursuant to ASTM D4101

**Processing conditions:** Recommended extrusion temperature : 250 °C  
 Recommended stretching temperature : 155 °C  
 Recommended stretching ratio : 4 – 6

**Storage and handling:** Aramco PP HP40G should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C

**Food Contact and other Regulations:** Aramco PP HP40G resins are suitable for food contact applications. Detailed information is provided in Material Safety Datasheet and for additional specific information, please contact Saudi Aramco Products Trading Company for certificates.

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