



**Polypropylene Homopolymer**

**HKQ205**

**MFR: 3.0 g/10min**

**Density: 0.905 g/cm<sup>3</sup>**

**Features**

- Low flow
- Standard molecular weight distribution
- Medium isotacticity
- Specifically formulated for the production of BOPP film

**Applications**

**Extrusion**

- Co-extrusion application
- Print lamination
- Metallized film
- Coated film
- Pressure sensitive tapes
- Food packaging
- Cigarette & textile packaging

**Additives**

- Antioxidant
- Processing stabiliser
- Acid scavenger (calcium stearate free)

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
<b>Resin Properties</b>	Melt mass-flow rate – MFR (230/2.16)	3.0 g/10min	3.0 g/10min	ISO 1133
<b>Physical Properties</b>	Flexural modulus	1 350 MPa	195 800 psi	ISO 178
	Tensile modulus of elasticity	1 400 MPa	203 050 psi	ISO 527-2
	Tensile stress at yield	33 MPa	4 786 psi	ISO 527-2
	Tensile strain at yield	10 %	10 %	ISO 527-2
	Tensile strain at break	>50 %	>50 %	ISO 527-2
	Charpy notched impact strength (23°C)	4.5 kJ/m <sup>2</sup>	2.1 ft·lbf/in <sup>2</sup>	ISO 179-1
	Ball indentation hardness – HB	60 N/mm <sup>2</sup>	8 700 psi	ISO 2039-1
<b>Thermal Properties</b>	Melting temperature – DSC	165°C	328°F	ISO 11357-3
	Heat deflection temperature – HDT / A (1.8 MPa)	47°C	117°F	ISO 75-2
	Heat deflection temperature – HDT / B (0.45 MPa)	70°C	158°F	ISO 75-2
	Vicat softening temperature – VST / A120 (10 N)	153°C	307°F	ISO 306





**Typical processing conditions – HKQ205**

**Film extrusion**

MELT TEMPERATURE 220 - 260°C

D	°C	5	4	3	2	1	H
	300						
	260						
	220						
	180						
	140						
	100						
	60						
	20						



**Handling**

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapours. Please consult the material safety data sheet (SDS) for more detailed information.

**Storage**

As ultraviolet light may cause a change in material properties, all resins should be protected from direct sunlight during storage. If stored in cool (<25°C), dry area with low ambient light levels, polyolefin resins are expected to maintain their original material and processing properties for at least 12 months.

**Combustibility**

Polypropylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources. In burning, polypropylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water, water mist being preferred. In enclosed areas, fire fighters should be provided with self contained breathing apparatus.

**Conveying**

Conveying equipment should be designed to prevent accumulation of fines and dust particles that are contained in all polypropylene resins. The fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

- be equipped with adequate filters
- is operated and maintained in such a manner to ensure no leaks develop
- that adequate grounding exists at all times

It is further recommended that good housekeeping is practiced throughout the facility.

**Regulatory & Legal Compliance**

This material complies with FDA regulation 21 CFR 177.1520 when used unmodified and according to good manufacturing practices for food contact applications. Refer to applicable food contact compliance statement which is available on request.

This material is not medically approved and should therefore not be used in any such application.

