

# Queo™ 1001

## Octene-1 Plastomer

## DATA SHEET

### Description and Attributes

Queo™ 1001 is an ethylene based octene plastomer produced using a metallocene catalyst in a solution polymerisation process.

Queo 1001 is a versatile blend partner for other polyolefins in film, extrusion and moulding applications, offering :

- Unrivalled sealing properties
- Outstanding toughness, puncture resistance and low temperature impact strength
- Excellent polyolefin compatibility
- Flexibility
- Excellent environmental stress cracking resistance
- Low amount of extractables
- High clarity

### Applications

Demonstrated applications include :

- Seal layers in lamination and flexible barrier films
- High strength flexible films
- Flexible low voltage insulation
- Blow moulded articles
- Flexible automotive boots and bellows
- Soft foams

### Additives

Queo 1001 contains processing stabilizers.

General properties	Units	Typical values [1]	Method
Melt Flow Rate (2.16 kg/190°C)	dg/min	1.1	ISO 1133
Density (23°C)	kg/m <sup>3</sup>	910	ISO 1183
Shore D hardness	--	49	ISO 868
DSC peak melting point	°C	106	ISO 11357
Vicat softening temperature (at 10 N)	°C	93	ISO 306
Brittleness temperature	°C	< -76	ASTM D746

### Film properties [2]

Gloss		81	ASTM 2457 (45°)
Haze	%	2	ASTM D1003 (A)
Tensile modulus	MPa	90	ASTM D882
Seal initiation temperature	°C	87	ASTM F88
Puncture resistance energy	mJ/mm	2800	Internal method
Impact strength (blown film Monsanto dart)	g/μm	> 22	ASTM D1709-75

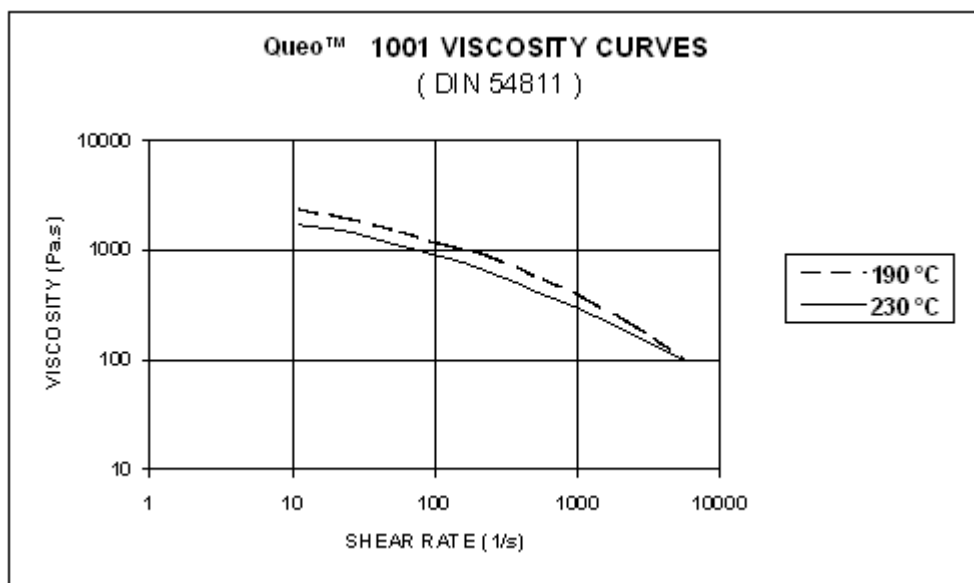
### Moulded plaque properties [3]

Tensile strength at break	MPa	35	ISO 527-2 (5A)
Elongation at break	%	750	ISO 527-2 (5A)
Flexural modulus	MPa	132	ISO 178
Notched Izod @ 23°C	kJ/m <sup>2</sup>	No break	ISO 180 (1A)
Environmental stress crack resistance	hr	> 1000	ASTM D1693 (method B)

[1] Values are typical and not to be interpreted as specifications.

[2] Specifics of 40 μm blown film.

[3] Specifics of compression moulded test specimen.



### ***Food Law Compliance and Product Handling***

Queo 1001 can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your sales representative for more detailed information and/or actual compliance certification documents.

Specific information on material safety aspects of Queo 1001 will be provided upon request.

### ***Standard Packaging***

Queo 1001 is supplied as free flowing pellets in bulk or packaged in 25 kg bags. The 25 kg bags are assembled on a heat treated pallet to a net weight of 1'375 kg and covered with a stretch hood.