

## PRODUCT DATA SHEET

01.03.2016 Ed.4

# **Plastomer/Elastomer** **Queo™ 0201**

### Description

**Queo 0201** is an ethylene based octene-1 plastomer, produced in a solution polymerisation process using a metallocene catalyst.

**CAS-No.** 26221-73-8

### Applications

**Queo 0201** Demonstrated applications include:

Seal layers in lamination and flexible barrier films  
 High strength flexible films  
 Heat shrinkable display film  
 Specialty stretch film applications  
 PP film toughness modification  
 Roof coverings

Tunnel linings  
 Flexible low voltage insulation  
 Halogen free flame retardant compounds  
 Blow moulding  
 Soft foams, e.g. artificial wine corks

### Additives

**Queo 0201** contains processing stabilizers

### Special Features

**Queo 0201** is optimised to deliver:

Excellent environmental stress cracking resistance (ESCR)  
 High clarity  
 Flexibility  
 Versatile blending with other polyolefins in film, extrusion and moulding applications.

Unrivalled sealing and hot tack properties at low temperature  
 Low amount of extractables  
 Outstanding toughness  
 Outstanding puncture resistance  
 Low temperature impact strength

### Physical Properties

| Property                                              | Typical Value         | Test Method   |
|-------------------------------------------------------|-----------------------|---------------|
| Data should not be used for specification work        |                       |               |
| Density (23 °C)                                       | 902 kg/m <sup>3</sup> | ISO 1183      |
| Melt Flow Rate (190 °C/2,16 kg)                       | 1,1 dg/min            | ISO 1133      |
| Flexural Modulus <sup>1</sup>                         | 72 MPa                | ISO 178       |
| Tensile Modulus                                       | 65 MPa                | ASTM D 882-A  |
| Tensile Strength <sup>1</sup>                         | 36 MPa                | ISO 527-2     |
| Elongation at Break <sup>1</sup>                      | 715 %                 | ISO 527-2     |
| Melting temperature (DSC)                             | 97 °C                 | ISO 11357-3   |
| Seal Initiation Temperature                           | 78 °C                 | ASTM F88      |
| Vicat softening temperature (10 N)                    | 82 °C                 | ISO 306       |
| Brittleness temperature                               | < -90 °C              | ASTM D 746    |
| Environmental Stress Crack Resistance () <sup>1</sup> | > 1.000 hrs           | ASTM D 1693-B |
| Izod Impact Strength, notched (23 °C) <sup>1</sup>    | No break              | ISO 180/1A    |

Queo is a trademark of the Borealis group.

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# Queo 0201

Hardness, Shore D

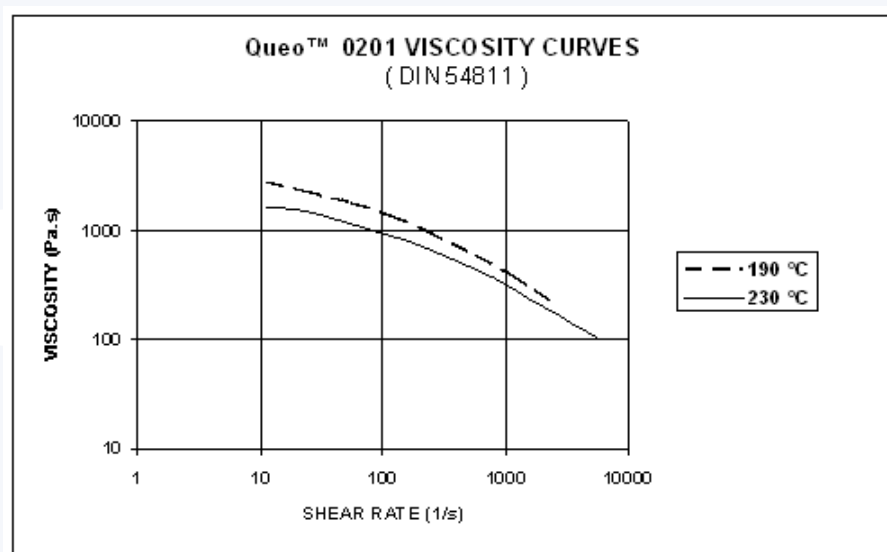
43

ISO 868

<sup>1</sup> Measured on moulded plaques.

## Film Properties

| Property                                       | Typical Value | Test Method     |
|------------------------------------------------|---------------|-----------------|
| Data should not be used for specification work |               |                 |
| Dart Drop <sup>1</sup>                         | > 48 g/μm     | ASTM D1709      |
| Puncture resistance                            | 2800 mJ/mm    | Borealis Method |
| Haze                                           | 2 %           | ASTM D 1003     |
| Gloss (45 °C)                                  | 84            | ASTM D 2457     |

<sup>1</sup> Blown film Monsanto dart


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 **Plastomer/Elastomer**  
**Queo 0201****Storage**

**Queo 0201** This polymer, like most polymers, is combustible so the usual precautions concerning ignition sources should be taken in warehouses and storage rooms. Where large quantities are kept in store, it is necessary to observe the normal rules for orderly stock control and it is recommended to use the first in – first out (FIFO) principle for stock planning. The products should be stored in a dry and clean facility to prevent contamination and not be exposed to direct sunlight as this may lead to quality deterioration. These materials have a shelf life of at least 3 (three) years after date of production, provided the material remains in its original unopened packaging and are stored under the storage conditions as described in this document. "Shelf life" means that there will not be any substantial difference compared to the agreed specification. The date of batch creation can be derived from the batch code printed on the bags representing. YYMMDDHLL (LL being two letters with no reference to the production time). Borealis Plastomers generally does not sell prime material older than 2 (two) years unannounced.

**Related Documents**

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

"Safety data sheet" / "Product safety information sheet"  
Statement on chemicals, regulations and standards  
General statement on compliance to food contact regulations  
Statement on polymer additives and BSE

**Disclaimer**

**The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.**

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

**Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.**

**It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.**

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.

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