



# SABIC® PET BC211

CRYSTALLINE POLYETHYLENE TEREPHTHALATE (PET)

## DESCRIPTION

BC211 is a crystalline, high molecular weight thermoplastic polymer made by continuous melt-phase polymerization process followed by solid-state polymerization. BC211 is especially formulated bottle grade PET characterized by low I.V., and low acetaldehyde generation during melting.

## TYPICAL APPLICATIONS

BC211 is especially suitable for the production of bottles for water and can be used for non-carbonated and other packaging applications.

## TYPICAL PROPERTY VALUES

Revision 20181009

| PROPERTIES                         | TYPICAL VALUES | UNITS             | TEST METHODS |
|------------------------------------|----------------|-------------------|--------------|
| <b>PHYSICAL PROPERTIES</b>         |                |                   |              |
| Intrinsic Viscosity <sup>(1)</sup> | 0.76 ± 0.02    | dl/g              | SABIC method |
| DEG Content                        | <1.5           | Wt. %             | SABIC method |
| Crystalline Density                | <1390          | kg/m <sup>3</sup> | SABIC method |
| Moisture Content                   | <0.35          | Wt. %             | SABIC method |
| <b>POLYMER PROPERTIES</b>          |                |                   |              |
| Acetaldehyde                       | <1             | ppm               | SABIC method |
| Color (L)                          | 89 ± 4.0       | L-value           | IRC 0051     |
| Color (b)                          | -1.5 ± 2.0     | b-value           | IRC 0051     |
| Dust Content                       | <0.01          | Wt. %             | SABIC method |
| Bulk Density                       | 850 ± 10       | kg/m <sup>3</sup> | ASTM D1895   |

(1) Typical values; not to be construed as specification limits.

## PROCESSING CONDITIONS

The PET (BC211) has to be dried to moisture content below about 30-40 ppm. The drying conditions typically used are 180 °C for 5 hours; the dew point of the drying air should be at least -40 °C. Typically, injection temperatures of 275 °C may be used to get clear preforms with low acetaldehyde level. Even lower injection temperature can be tried, but if the preforms become hazy, the temperature should be raised. Low screw backpressures should be used.

## FOOD REGULATION

BC211 is suitable for food contact application. Detail information provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

## STORAGE AND HANDLING

PET resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry with relative humidity below 50% and temperatures preferably do not exceed 50 °C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PET within 6 months after delivery.



#### DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

