

# SABIC® PET BC211

## CRYSTALLINE POLYETHYLENE TEREPHTHALATE (PET)

## **DESCRIPTION**

BC211 is a crystalline, high molecular weight thermoplastic polymer made by continues 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 20181012

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES			
Intrinsic Viscosity (1)	$0.76 \pm 0.02$	dl/g	SABIC method
DEG Content	<1.5	% w/w	SABIC method
Crystalline Density	<1390	kg/m³	SABIC method
Moisture Content	<0.35	% w/w	SABIC method
POLYMER PROPERTIES			
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	% w/w	SABIC method
Bulk Density	850 ± 10	kg/m³	ASTM D1895

<sup>(1)</sup> 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 maybe 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.



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