

SABIC® HDPE B4660AB

HIGH DENSITY POLYETHYLENE

DESCRIPTION

B4660AB grade are medium molecular weight High Density Polyethylene homopolymer for blow molding Applications. They are primarily Designed for imparting high rigidity, toughness and good processability. These unique properties offer the possibility to reduce weight at very good top load strength. B4660AB: Suitable for Water packaging

TYPICAL APPLICATIONS

B4660 Series resins are primarily intended for blow molding bottles for the food and beverage industry. The grade B4660AB is specifically recommended for water packaging applications. The grades are intended to meet customer specifications in respect of purity, healthiness and organoleptic. They can also be used in other hollow thin-walled parts and profile extrusions. They are not recommended for packaging Environmentally active materials such as soaps, detergents, shampoos, etc.

TYPICAL PROPERTY VALUES

Revision 20210715

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR) (1)			
@ 190°C & 2.16 kg load ⁽¹⁾	0.7	g/10 min	ASTM D1238
@ 190°C & 5 kg load	2.8	g/10 min	ASTM D1238
@ 190°C & 21.6 kg load	46	g/10 min	ASTM D1238
Density at 23°C	961	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
1% Secant Modulus	>1000	MPa	ASTM D638
Tensile Strength at Yield	30	MPa	ASTM D638
Tensile Strength at Break	18	MPa	ASTM D638
Tensile Elongation at Break	500	%	ASTM D638
Flexural Strength ⁽²⁾	28	MPa	ASTM D790
Flexural Modulus	1100	MPa	ISO 178/1A
Izod Impact Strength	150	J/m	ASTM D256
Hardness (Shore D)	66	-	ASTM D2240
THERMAL PROPERTIES			
Vicat Softening Point	127	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

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

PROCESSING CONDITIONS

Typical processing conditions for B4660 are:

Barrel temperature: 170-200°C Melt temperature: 180-210°C

⁽²⁾ Based on compression molded sheet.



STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't 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 PE resin 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.