

POLYMERS

# SABIC<sup>®</sup> HDPE Blow molding

## B4660

Series

### PRODUCT DESCRIPTION

B4660 Series grades 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.

B4660 series includes following grades:

B4660: Suitable for Dairy products and Juice Packaging, 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 DATA

| PROPERTIES                                 | Unit              | Value <sup>(1)</sup> | Test Method |
|--|-------------------|----------------------|-------------|
| Melt Flow Rate                             |                   |                      |             |
| @ 190°C & 2.16 kg load                     | g/10 min          | 0.7                  | ASTM D 1238 |
| @ 190°C & 5 kg load                        |                   | 2.8                  |             |
| @ 190°C & 21.6 kg load                     |                   | 46                   |             |
| Density @ 23°C                             | Kg/m <sup>3</sup> | 961                  | ASTM D 1505 |
| <b>MECHANICAL PROPERTIES<sup>(2)</sup></b> |                   |                      |             |
| 1% Secant Modulus                          | MPa               | >1000                | ASTM D 638  |
| Tensile Strength @ Yield                   | MPa               | 30                   | ASTM D 638  |
| Tensile Strength @ Break                   | MPa               | 18                   | ASTM D 638  |
| Tensile Elongation @ Break                 | %                 | 500                  | ASTM D 638  |
| Flexural Strength                          | MPa               | 28                   | ASTM D 790  |
| Flexural Modulus                           | MPa               | 1100                 | ASTM D 790  |
| Izod Impact                                | J/m               | 150                  | ASTM D 256  |
| Hardness (Shore D)                         | -                 | 66                   | ASTM D 2240 |
| <b>THERMAL PROPERTIES</b>                  |                   |                      |             |
| Vicat Softening Point                      | °C                | 127                  | ASTM D 1525 |
| Brittleness Temperature                    | °C                | <-75                 | ASTM D 746  |