



# BM5723 (Provisional Data sheet)

High Density Polyethylene for Blow molding

## Product Description

BM5723 grade is medium molecular weight High Density Polyethylene copolymer. It is primarily intended for blow molding articles of small sizes. BM5723 grade offers excellent balance of stiffness and ESCR properties with high load bearing strength and easy processability.

## Typical Applications

BM5723 grade is classified as multipurpose blow molding grade. It may be blow molded into containers for household and industrial chemicals (eg. Detergents, bleach, fabric softeners, solvents, paints etc), automotive supplies, foodstuffs, toiletries and cosmetics. It can also be used in other hollow thin-walled parts and profile extrusions.

## Typical data

Properties	Unit	Value <sup>(1)</sup>	ASTM Method
<b>Resin Properties</b>			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	0.23	D 1238
@ 190°C & 21.6 kg load		23	
Density @ 23°C	kg/m <sup>3</sup>	957	D 1505
<b>Mechanical Properties<sup>(2)</sup></b>			
1% Secant Modulus	MPa	1200	D 638
Tensile Strength @ Yield	MPa	30	D 638
Tensile Strength @ Break	MPa	22	D 638
Tensile Elongation @ Break	%	>1000	D 638
Flexural Strength	MPa	26	D 790
Flexural Modulus	MPa	1100	D 790
Izod Impact	J/m	260	D 256
Hardness (Shore D)	-	65	D 2240
ESCR <sup>(3)</sup> (10% Igepal), F <sub>50</sub>	Hrs	75	D 1693B
<b>Thermal Properties</b>			
Vicat Softening Point	°C	128	D 1525
Brittleness Temperature	°C	< -75	D 746

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

(2) Based on Compression molded sheet

(3) Sample prepared by two roll mill and then specimen molded as per ASTM D 4703

## Processing Conditions

Typical processing conditions for BM5723 are:

Barrel temperature: 170 - 220°C

Melt temperature: 190 - 220°C

### **Food Regulation**

BM5723 grade is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

### **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.

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