

Product Description

B5429 Series grades are medium molecular weight High Density Polyethylene copolymer. They are primarily intended for blow molding articles of small sizes. B5429 series grades offers excellent combination of toughness, stress cracking resistance, load bearing strength with easy processability. The grade available with antistatic additive is B5429A.

Typical Applications

B5429 series grades are classified as multipurpose blow molding grades. They 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. They can also be used in other hollow thin-walled parts and profile extrusions.

Typical data

Properties	Unit	Value ⁽¹⁾	ASTM Method
Resin Properties			
Melt Flow Rate			
@ 190°C & 2.16 kg load	g/10 min.	0.3	D 1238
@ 190°C & 21.6 kg load		29	
Density @ 23°C	kg/m ³	954	D 1505
Mechanical Properties⁽²⁾			
1% Secant Modulus	MPa	1050	D 638
Tensile Strength @ Yield	MPa	28	D 638
Tensile Strength @ Break	MPa	19	D 638
Tensile Elongation @ Break	%	>500	D 638
Flexural Strength	MPa	25	D 790
Flexural Modulus	MPa	1000	D 790
Izod Impact	J/m	180	D 256
Hardness (Shore D)	-	65	D 2240
ESCR (100% Igepal), F ₅₀	Hrs	100	D 1693B
ESCR (10% Igepal), F ₅₀	Hrs	60	
Thermal Properties			
Vicat Softening Point	°C	124	D 1525
Brittleness Temperature	°C	< -75	D 746

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

(2) Based on Compression molded sheet

Processing Conditions

Typical processing conditions for B5429 are:

Barrel temperature: 170 - 220°C

Melt temperature: 190 - 220°C

Food Regulation

B5429 series grades are 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.