# Braskem PE IB-58

## High Density Polyethylene

#### Braskem

## Message:

IB58 is a High Density Polyethylene, narrow molecular weight butene-1 copolymer, produced by solution process, for injection molding applications. It offers very good processability combined with good stiffness, impact strength and stress crack resistance. It contains antioxidant additive. Application:

Thin-wall articles, housewares, toys, food containers and general purpose containers for indoor applications.

Features   Antioxidant     Butene Comonomer     Food Contact Acceptable     Good Impact Resistance     Good Stiffness     High ESCR (Stress Crack Resist.)     Narrow Molecular Weight Distribution     Uses     Containers     Household Goods     Hin-walled Parts     Toys     Agency Ratings     Polets     Processing Method     Nerrow Molding     Physical     Narion Molding     Physical     Specific Gravity     0.958     gords "Gravita"     Kgl     Specific Gravity     0.958     gords "Gravita"     Kgl     Specific Gravity     Optimum Staff (Sign Staff)     Specific Gra	General Information					
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	Melt Mass-Flow Rate (MFR) (190°C/2.16	25	40 ·			
		35	g/10 min			
	Environmental Stress-Cracking Resistance			ASTM D1693		
50°C, 2.00 mm, 10% Igepal,Compression Molded, F50< 1.00	Compression Molded, F50	< 1.00	hr			
50°C, 2.00 mm, 100% Igepal,     Compression Molded, F50   < 2.00	50°C, 2.00 mm, 100% Igepal, Compression Molded, F50	< 2.00	hr			
Hardness Nominal Value Unit Test Method	Hardness	Nominal Value	Unit	Test Method		
	Durometer Hardness (Shore D, Compression Molded)	59		ASTM D2240		
Mechanical Nominal Value Unit Test Method	Mechanical	Nominal Value	Unit	Test Method		

Tensile Strength			ASTM D638
Yield, Compression Molded	28.0	MPa	
Break, Compression Molded	26.0	MPa	
Flexural Modulus - 1% Secant			
(Compression Molded)	1230	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (Compression			
Molded)	30	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45			
MPa, Unannealed, Compression Molded)	77.0	°C	ASTM D648
Vicat Softening Temperature	125	°C	ASTM D1525 <sup>1</sup>
Injection	Nominal Value	Unit	
Processing (Melt) Temp	160 to 230	°C	
NOTE			

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