

Producer: Saudi Basic Industries Corporation (Sabic) /Saudi Arabia

M80064 Series

Description:

High Density Polyethylene for Injection molding.

M80064 is High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It

has been designed to give good rigidity, toughness and low warpage. M80064 is also available with UV stabilizer as M80064S.

Typical Applications:

M80064 series grades are recommended for crates, molded cases and trays, industrial pails and other similar products requiring toughness and rigidity.

DESCRIPTION OF PROPERTIES	UNIT	VALUE ⁽¹⁾	ASTM METHOD
Resin Properties			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	8	D 1238
Density @ 23°C	kg/m ³	964	D 1505
Mechanical Properties⁽²⁾			
1% Secant Modulus	Mpa	950	D 638
Tensile Strength @ Yield	Mpa	26	D 638
Tensile Strength @ Break	Mpa	18	D 638
Tensile Elongation @ Break	%	>800	D 638
Flexural Strength	Mpa	25	D 790
Flexural Modulus	Mpa	1000	D 790
Izod Impact	J/m	75	D 256
Hardness (Shore D)	-	62	D 2240
ESCR (100% Igepal), F ₅₀ *	Hrs	3	D 1693B
ESCR (10% Igepal), F ₅₀ *	Hrs	2	
Thermal Properties			
Vicat Softening Point	°C	125	D 1525
Brittleness Temperature	°C	< -75	D 746

⁽¹⁾ - Typical values should not be construed as specification limits.

⁽²⁾ - Based on Injection molded specimens

* Based on Compression molded sheet

Processing Conditions:

Typical processing conditions for M80064 are:

Barrel temperature: 200 - 250°C (390 - 480°F)

Mold temperature: 15 - 60°C (60 -140°F)

Injection pressure: 600 - 1000 Bar (8700 - 14500 psi)

Food Regulation: **M80064 series** grades are suitable for Food contact application.

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.