

SABIC® M80064

M80064 is a 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.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.964 g/cc	0.0348 lb/in ³	ASTM D1505

ESCR 100% Igepal®	3.0 hour	3.0 hour	F50; Based on compression molded sheet.; ASTM D1693B
-------------------	----------	----------	--

ESCR 10% Igepal®	2.0 hour	2.0 hour	F50; ASTM D1693B
------------------	----------	----------	------------------

Melt Flow	8.0 g/10 min @Load 2.16 kg, Temperature 190 °C	8.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
-----------	--	--	------------

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	62	62	ASTM D2240

Tensile Strength at Break	18.0 MPa	2610 psi	ASTM D638
---------------------------	----------	----------	-----------

Tensile Strength, Yield	26.0 MPa	3770 psi	ASTM D638
-------------------------	----------	----------	-----------

Elongation at Break	>= 800 %	>= 800 %	ASTM D638
---------------------	----------	----------	-----------

Flexural Strength	42.0 MPa	6090 psi	Based on Injection molded specimens.; ASTM D790
-------------------	----------	----------	---

Flexural Modulus	1.65 GPa	239 ksi	ASTM D790
------------------	----------	---------	-----------

1% Secant Modulus	950 MPa	138000 psi	ASTM D638
-------------------	---------	------------	-----------

Izod Impact, Notched	0.750 J/cm	1.41 ft-lb/in	ASTM D256
----------------------	------------	---------------	-----------

Thermal Properties	Metric	English	Comments
Vicat Softening Point	125 °C	257 °F	ASTM D1525

Brittleness Temperature	<= -75.0 °C	<= -103 °F	ASTM D746
-------------------------	-------------	------------	-----------