

SABIC® M300054

M300054 is a High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good flow properties, low warpage with good dimensional stability and high gloss.

Physical Properties	Metric	English	Comments
Density	0.954 g/cc	0.0345 lb/in ³	ASTM D1505

ESCR 100% Igepal®

<= 1.0 hour

<= 1.0 hour

F50; Based on compression molded sheet.; ASTM D1693B

ESCR 10% Igepal®

<= 1.0 hour

<= 1.0 hour

F50; ASTM D1693B

Melt Flow

30 g/10 min
@Load 2.16 kg,
Temperature 190 °C

30 g/10 min
@Load 4.76 lb,
Temperature 374 °F

ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60	60	ASTM D2240

Tensile Strength at Break

12.0 MPa

1740 psi

ASTM D638

Tensile Strength, Yield

23.0 MPa

3340 psi

ASTM D638

Elongation at Break

200 %

200 %

ASTM D638

Flexural Strength

22.0 MPa

3190 psi

ASTM D790

Flexural Modulus

0.800 GPa

116 ksi

ISO 178/1A

1% Secant Modulus

750 MPa

109000 psi

Based on Injection molded specimens.; ASTM D638

Izod Impact, Notched

0.280 J/cm

0.525 ft-lb/in

ASTM D256

Thermal Properties	Metric	English	Comments
Vicat Softening Point	121 °C	250 °F	ASTM D1525

Brittleness Temperature

<= -75.0 °C

<= -103 °F

ASTM D746