

SABIC® HDPE M40055S

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC HDPE M40055S is a high-density polyethylene especially developed for injection molding application. It has been designed to provide good balance of stiffness, impact at low temperatures and UV stability for outdoors

TYPICAL APPLICATIONS

• Waste bins and shipping containers. • Industrial pails. • Housewares.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	4.0	g/10 min	ASTM D1238
Density			
Density	0.955	g/cm ³	ASTM D792
Mould shrinkage			
Molding Shrinkage - Flow (250°C) ⁽²⁾	2.6	%	ASTM D955
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile test ^{(1) (2)}			
Tensile Strength @ Yield	25.0	MPa	ASTM D638
Tensile Strength @ Break	12	MPa	ASTM D638
Tensile Elongation @ Break	720	%	ASTM D638
Flexural Strength	22	MPa	ASTM D790
Flexural Modulus	710	MPa	ASTM D790
THERMAL PROPERTIES			
Vicat Softening Temperature ^{(1) (2)}			
Vicat softening temperature	128	°C	ASTM D1525

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

(2) Based on Injection molded specimens

PROCESSING CONDITIONS

Typical processing conditions for M40055S are:

Barrel temperature: 200°C-250°C

Mold temperature: 15-60°C