

# 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
<b>POLYMER PROPERTIES<sup>(1)</sup></b>			
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	4.0	g/10 min	ASTM D1238
<b>Density</b>			
Density	0.955	g/cm <sup>3</sup>	ASTM D792
<b>Mould shrinkage</b>			
Molding Shrinkage - Flow (250°C) <sup>(2)</sup>	2.6	%	ASTM D955
<b>MECHANICAL PROPERTIES<sup>(1)</sup></b>			
<b>Tensile test<sup>(1) (2)</sup></b>			
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
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature<sup>(1) (2)</sup></b>			
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