

SABIC® HDPE A5530

HIGH DENSITY POLYETHYLENE FOR BLOW MOLDING APPLICATION OF AUTOMOTIVE

DESCRIPTION

SABIC® HDPE A5530 is medium molecular weight High Density Polyethylene copolymer. It is primarily intended for blow molding articles of small sizes. It offers an excellent combination of toughness, stress cracking resistance, load bearing strength with easy processability, excellent VOC performance, and low Odor.

TYPICAL APPLICATIONS

SABIC® HDPE A5530 is blow molding grade designed for automotive application, includes air ducts, containers.

TYPICAL PROPERTY VALUES

Revision 20260224

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.3	g/10 min	ASTM D1238
at 190°C and 21.6 kg	30	g/10 min	ASTM D1238
Density at 23°C	953	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES ⁽²⁾			
Izod Impact Strength	728	J/m	ASTM D256
Charpy Impact Strength Notched			
at 23 °C	840	J/m	ASTM D256
Tensile Strength at Yield	27	MPa	ASTM D638
Tensile Elongation at Break	800	%	ASTM D638
Flexural Strength	25	MPa	ASTM D790
Flexural Modulus	1000	MPa	ISO 178/ 1A
ESCR (100% Igepal), F50	100	Hrs	ASTM D1693B
ESCR (10% Igepal), F50	60	Hrs	ASTM D1693B
THERMAL PROPERTIES			
Heat Deflection Temperature at 455kPa	72	°C	ASTM D648
Vicat Softening Point	124	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

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

(2) Based on compression molded sheet.

PROCESSING CONDITIONS

Typical processing conditions for A5530 are:

Barrel temperature: 170 - 200°C

Melt temperature: 190 - 220°C



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. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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