

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/m³	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

© 2026 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

PETROMALL

