



SABIC® HDPE B5308

HIGH DENSITY POLYETHYLENE FOR EXTRUSION BLOW MOLDING

DESCRIPTION

HDPE B5308 is a multi-modal HMW HDPE grade specifically designed for blow molding floaters for floating photovoltaic (PV) panel systems. It has outstanding ESCR (environmental stress crack resistance), excellent mechanical properties, very good toughness and stiffness balance, long lifetime and easy blow molding processability. B5308 is also suitable for large size containers such as water tanks and transportation containers when high ESCR and toughness/stiffness balance is required.

TYPICAL PROPERTY VALUES

Revision 20211207

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL ⁽¹⁾			
Density	0.953	g/cm ³	ISO 1183
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 21.6 kg load	8	g/10 min	ISO 1133
@ 190°C & 5 kg load	0.32	g/10 min	ISO 1133
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile Strength @ Yield	25	MPa	ISO 527
Tensile Strength @ Break	35	MPa	ISO 527
Tensile Elongation @ Break	>800	%	ISO 527
Izod Impact , Notched, 23 °C	22	kJ/m ²	ISO 180
Izod Impact, Notched, -30°C	10	kJ/m ²	ISO 180
Tensile modulus	1050	MPa	ISO 527
Hardness Shore D	60	-	ISO 868
ESCR (10% Igepal), F50	>1000	Hrs	ASTM D1693B
THERMAL PROPERTIES ⁽¹⁾			
Melting temperature (10 °C/min)	132	°C	ISO 11357-1/-3
Heat Deflection Temperature (455 kPa)	73	°C	ISO 75
Vicat Softening Point @ 10N (VST/A)	126	°C	ISO 306

⁽¹⁾ Data in above are typical properties and not to be construed as specifications.

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.