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 20210407

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL (1)			
Density	0.953	g/cm³	ISO 1183
POLYMER PROPERTIES (1)			
Melt Flow Rate @ 190°C & 21.6 kg load	8	g/10 min	ISO 1133
Melt Flow Rate @ 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 ℃	22	kJ/m²	ISO 180
Izod Impact, Notched, -30℃	10	kJ/m²	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.

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and Food Contact Declaration, available on the Internet (www.SABIC.com). Additional specific information can be requested via SABIC local sales and technical representatives.

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

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