

TECHNICAL DATASHEET

B5429



PRODUCT DESCRIPTION

HDPE B5429 is medium molecular weight high density polyethylene copolymer. It is typically used for blow moulding bottles of small sizes. HDPE B5429 offers very good combination of toughness, stress cracking resistance (ESCR), load bearing strength and processability characteristics.

TRPICAL APPLICATION

HDPE B5429 is classified as a multipurpose blow moulding grade. It may be blow moulded into containers for household and industrial chemicals (e.g. detergents, bleach, fabric softeners, solvents, paints, etc.), automotive supplies, foodstuffs, toiletries and cosmetics. It is typically also used for other hollow thin-walled parts and profile extrusions.

TYPICAL DATA

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR) at 190 °C and 2.16 kg at 190 °C and 5 kg at 190 °C and 21.6 kg	g/10 min g/10 min g/10 min	0.3 1.5 29	ASTM D 1238
Density ¹⁾	kg/m³	954	ASTM D 1505
Mechanical properties ¹⁾			
Tensile test stress at yield strain at yield stress at break strain at break secant modulus at 1% elongation	MPa % MPa % MPa	27 17 >1000 1200	ASTM D 638
Flexural test flexural modulus, 1% secant flexural strength	MPa MPa	1250 36	ASTM D 790
Izod impact notched at 23 °C at -30 °C	J/m J/m	150 55	ASTM D 256
Hardness Shore D	-	65	ASTM D 2240
ESCR (10% Igepal), F50	h	40	ASTM D 1693B
Thermal properties			
Heat deflection temperature ¹⁾ at 0.45 MPa (HDT/B)	°C	84	ASTM D 648
Vicat softening temperature ¹⁾ at 10 N (VST/A)	°C	125	ASTM D 1525
DSC test melting point	°C	131	ASTM D 3418