

SABIC® HDPE ICP4504X

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® ICP4504X is a high molecular weight High Density Polyethylene copolymer grade with broad molecular weight distribution. SABIC® ICP4504X is typically used for state of the art blow molding UN certified Jerry cans and drums. This food approved grade combines good processing performance with excellent stress crack resistance, stiffness and impact performance.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

Revision 20241222

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 21.6 kg	5.2	g/10 min	ASTM D1238
Density			
@ 23°C	944	kg/m³	ASTM D1505
MECHANICAL PROPERTIES ⁽¹⁾			
1% Secant Modulus			
	795	MPa	ASTM D638
Tensile strength			
@ Yield 2 in./min, Type IV	21	MPa	ASTM D638
Tensile Elongation			
@ Break 2 in./min, Type IV	630	MPa	ASTM D638
Flexural Modulus			
	680	MPa	ASTM D790
Izod Impact Strength			
	575	J/m	ASTM D256
Durometer Hardness			
Type D (Shore D)	54	-	ASTM D2240
ESCR			
Condition B (10% Igepal), F50	>1000	Hrs	ASTM D1693
THERMAL PROPERTIES ⁽¹⁾			
Vicat softening temperature			
Loading 1, Rate A	124	°C	ASTM D256

(1) The physical properties were determined on compression molded specimens.

PROCESSING CONDITIONS

Recommended processing temperatures: 190 - 230°C

HEALTH AND SAFETY CONSIDERATIONS AND PRECAUTIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration; Additional specific information can be requested via your local Sales Office.

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CHEMISTRY THAT MATTERS™



STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent direct exposure to sunlight and/or heat. The storage area should also be dry and preferably not exceeding 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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