

SABIC® HDPE ICP4507S

HIGH DENSITY POLYETHYLENE

DESCRIPTION

ICP4507S is a high molecular weight High Density Polyethylene copolymer grade with broad molecular weight distribution. It has excellent processability and exhibits very high impact strength, stiffness, and superior environmental stress crack resistance.

TYPICAL APPLICATIONS

ICP4507S resin is specially designed for blow molding of large containers such as intermediate bulk container (IBC) and containers for industrial use.

TYPICAL PROPERTY VALUES

Revision 20241219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 21.6 kg	6.5	g/10 min	ASTM D1238
Density at 23°C	947	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES ⁽²⁾			
1% Secant Modulus	910	MPa	ASTM D638
Tensile strength			
@ Yield	26	MPa	ASTM D638
Flexural Strength	18	MPa	ASTM D790
Flexural Modulus	670	MPa	ASTM D790
Izod Impact Strength	520	J/m	ASTM D256
Izod impact notched at -30 °C	243	J/m	ASTM D256
ESCR ⁽³⁾			
Condition B (10% Igepal), F50*	>1000	Hrs	ASTM D1693
THERMAL PROPERTIES ⁽¹⁾			
Vicat softening temperature			
Loading 1, Rate A	126	°C	ASTM D256

(1) Typical values: not to be construed as specification limits.

(2) Based on Injection molded sheet

(3) *Based on compression molded sheet

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.

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.



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