



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



#### 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 NONINFRINGEMENT 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.

