

Stamylex 5119 S

Linear low density polyethylene

DATA SHEET

Description and Attributes

Stamylex 5119 S is a linear low density polyethylene produced in a solution polymerisation process using a Ziegler – Natta catalyst.

Stamylex 5119 S offers a combination of :

- good flow properties
- mechanical properties
- narrow additive tolerances

Applications

Stamyles 5119 S is especially suited for use in caps of non-carbonated mineral water bottles, afforded by good sealing properties, unscrewing torque and organoleptic properties. The material is designed for trouble-free operation on fast bottle filling lines.

Polymer properties	Units	Typical values	Method
Melt Flow Rate (2.16 kg/190°C)	dg/min	11	ISO 1133
Density (23°C) [1,2]	kg/m ³	944	ISO 1183 (A)
Mechanical properties [2,3]	Units	Typical values	Method
Tensile test [5]			ISO 527/2
Stress at break [7]	MPa	12.3	
Strain at break [7]	%	39	
Tensile modulus [6]	MPa	700	
Notched Izod [9]			ISO 180/A
at + 23 °C	KJ/m ³	3.7	
Shore hardness D [11]		57	ISO 868
Thermal properties			
Vicat softening temperature at 10 N (VST/A)	°C	115	ISO 306
DSC melting point [13]	°C	125	DIN 53765
Enthalpy change	J/g	180	DIN 53765

[1] Specimen dimensions : 42 x 42 x 1.6 mm

[2] Compression moulding conditions of test specimen (per ISO 293) : moulding temperature 160 °C, cooling rate 40 °C/min

[3] Conditioning of test specimen : temperature 23 °C, RH 50 %, 16 hrs

[5] Test specimen as per ISO 527/2 type 1 BA, thickness 2 mm

[6] Speed of testing : 1 mm/min

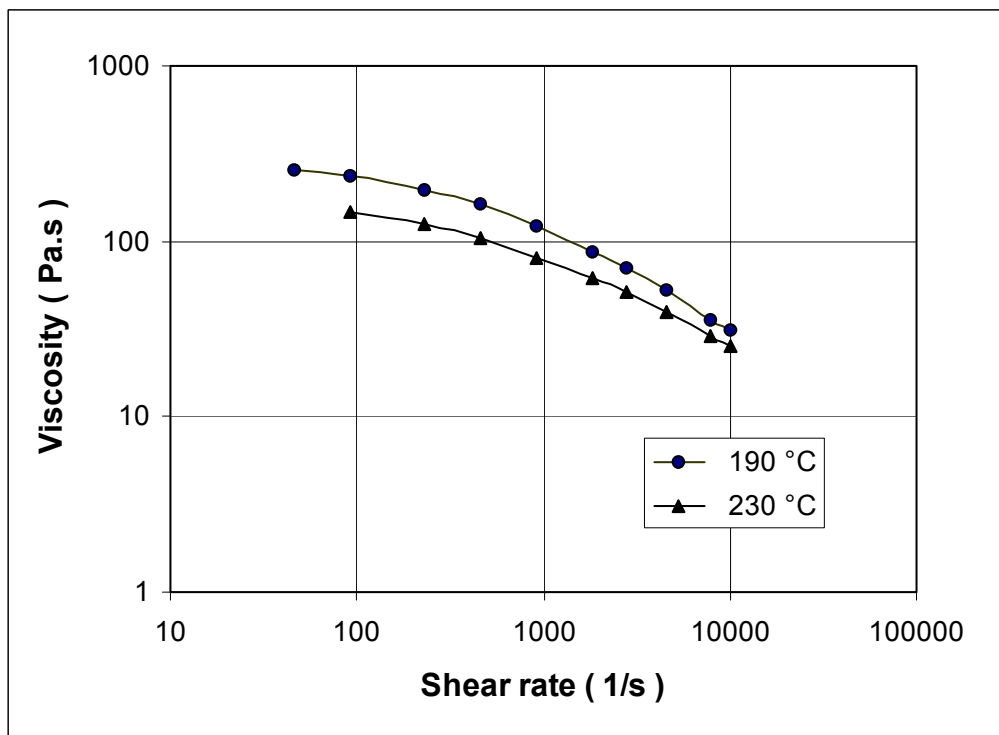
[7] Speed of testing : 500 mm/min

[9] Specimen dimensions : 80 x 10 x 4 mm, notch 45 °, r 0.01"

[11] After 15 seconds

[13] Top melt temperature at 10 °C/min

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Food Law Compliance and Product Handling

Stamylex 5119 S complies with FDA 21 CFR 177.1520 (olefin polymers). More detailed and specific information on food law compliance and material safety aspects of Stamylex grades will be provided upon request.

Packaging

Stamylex 5119 S is supplied as free flowing pellets with standard package type 25 kg bags on shrink wrapped pallets with a total weight of 1'375 kg.

Further information

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