

TECHNICAL DATA SHEET

POLYETHYLENE TIPELIN 6000B

HDPE for Blow moulding

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

The joint product portfolio of MOL Petrochemicals and Slovnaft provides infinite opportunities

DESCRIPTION

TIPELIN 6000B is a high density bimodal polyethylene copolymer (with butene-1 as comonomer) intended for blow moulding of products with high stiffness and very good environmental stress crack resistance (ESCR). The grade contains antioxidant and acid scavenger.

APPLICATIONS

TIPELIN 6000B is recommended for thin walled, small bottles up to 5 litre capacity for consumer goods such as cosmetics, daily care etc. and for blow moulded products for packaging of aggressive industrial chemicals bounded to UN certificates. It is suitable for corrugated pipes too.

PRODUCT COMPLIANCE

See DDS.

PROPERTIES

Parameter	Note	Test method	Unit	Typical value
Melt Mass-Flow Rate (MFR) (190 °C /2.16 kg)	-	ISO 1133-1	g/10 min	0.3
Melt Mass-Flow Rate (MFR) (190 °C /5 kg)	-	ISO 1133-1	g/10 min	1.3
Melt Mass-Flow Rate (MFR) (190 °C /21.6 kg)	-	ISO 1133-1	g/10 min	30
Density (23 °C)	(1)	ISO 1183-2	kg/m ³	958
Tensile Strength at Break	(1)	ISO 527-3	MPa	31
Tensile Strain at Break	(1)	ISO 527-3	%	1200
Tensile Strain at Yield	(1)	ISO 527-3	%	10
Tensile Stress at Yield	(1)	ISO 527-3	MPa	31
Flexural Modulus	(1)	ISO 178	MPa	1650
Izod Impact Strength (notched, 23 °C)	(1)	ISO 180/A	kJ/m ²	9
Vicat Softening Temperature	(1)	ISO 306/A 120	°C	129
Hardness Shore D	(1)	ISO 868	-	65
ESCR F50 B (10% Igepal CO-630)	(1)	ASTM D 1693	h	200
OIT (Oxidation induction time) at 200 °C	(1)	EN 728	min	30

Typical properties, not to be used as specification.

(1) Average mechanical property values of several measurements carried out on standard pressed specimens (ISO 293) conditioned at room temperature (ISO 291).

PROCESSING

TIPELIN 6000B can be used in conventional extrusion machines. Recommended processing temperatures are 180-220 °C.

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STORAGE AND HANDLING

Pellets are packed in 25 kg polyethylene bags and transported on shrink-wrapped or stretch-wrapped pallets at eligible load of polymer 1375 kg. We use adhesive between the bags in order to avoid their slipping. Pay attention to this fact during the removing of the bags from the pallets. The preferred method is to lift the bag at first without rotation. Heat treated pallets are provided by PRS, a member of the Faber Halbertma Group, operating a pooling system which collects the pallets after use, and organizes reuse as part of a sustainable, circular system. PRS pallets remain property of PRS at all times. For more detailed information please contact a sales representative at SLOVNAFT or at MOL Petrochemicals.

Since polyethylene is a combustible substance, the fire safety rules applicable for combustible materials in warehouses and store rooms should be observed.

If polymer is stored in conditions of high humidity and fluctuating temperatures, then atmospheric moisture can condense inside the packing. If it happened, it is recommended the pellets to be dried before use. During the storage polyethylene should not be exposed to UV radiation and temperatures above 40°C. Producer does not take responsibility for any damages caused by adverse storage.

REACH STATEMENT

Polymers are exempt of REACH registration. However, their raw materials which mean monomers and relevant additives have been registered. MOL Petrochemicals is committed to fully respect legislation and will only use REACH compliant raw materials. At this point in time HDPE TIPELIN does not contain any substances specifically identified as SVHC at levels greater than 0.1%.

RECYCLING

Polyethylene resins are suitable for recycling using modern recycling methods. n-house production waste should be kept clean to facilitate direct recycling.

SAFETY

See MSDS.

Flammability measurement according to UL 94 (2006): burning rate 22 mm/min, measured on HB specimens (size 125 x 13 x 3 mm).

DISCLAIMER

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Last revision: September/2021