

TECHNICAL DATA SHEET

POLYETHYLENE TIPELIN 3110J

HDPE for injection moulding

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

DESCRIPTION

TIPELIN 3110J is a copolymer polyethylene (butene-1 comonomer), intended for injection moulding and compression moulding of general purpose products. It offers good organoleptic properties, environmental stress crack resistance and improved long-term color stability. The grade contains antioxidant, acid scavenger and slip agent.

APPLICATIONS

TIPELIN 3110J is recommended for caps and closures for carbonated soft drinks, engineering and technical parts.

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	2
Density (23 °C)	(1)	ISO 1183-2	kg/m ³	952
Tensile Strength at Break	-	ISO 527-1,2	MPa	25
Tensile Strain at Break	-	ISO 527-1,2	%	880
Tensile Strain at Yield	(2)	ISO 527-1,2	%	12
Tensile Stress at Yield	(2)	ISO 527-1,2	MPa	23
Flexural Modulus	(2)	ISO 178	MPa	1000
Izod Impact Strength (notched, 23 °C)	(2)	ISO 180/A	kJ/m ²	10
Vicat Softening Temperature	-	ISO 306/A 120	°C	127
Hardness Shore D	(2)	ISO 868	-	62
ESCR F50 B (100% Igepal CO-630)	(1)	ASTM D 1693	h	20
Shrinkage (MD/TD)	(2)	ISO 294-4	%	1.8/3
OIT (Oxidation induction time) at 200 °C	-	EN 728	min	65

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).

(2) Average mechanical property values of several measurements carried out on standard injection moulded specimens (ISO 294-1) conditioned at room temperature (ISO 291).

PROCESSING

TIPELIN 3110J can be used in conventional injection moulding and compression moulding machines .

Recommended processing temperatures for injection moulding are 210 - 250 °C. Recommended processing temperatures for compression moulding are 170-200 °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.

DISCLAIMER

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MANUFACTURER

MOL Petrochemicals Co. Ltd.
H-3581 Tiszaújváros,
P.O. Box: 20
Hungary

TECHNICAL SERVICE

MOL PLC.
Polymer Technical Service MOL
H-3581 Tiszaújváros,
P.O. Box: 20
Hungary
Telephone:
+36 49 521 540
+36 80 204 248
E-mail: pts@mol.hu

SALES ORGANIZATION

GERMANY

Im Trutz Frankfurt 49,
D-60322 Frankfurt am Main, Germany
Telephone: +49 69 154 04 0
Fax: +49 69 154 04 41
E-mail: polymersales@molgermany.de

ITALY

Via Montefeltro, 4
20156 Milano, Italy
Telephone: +39 02 58 30 5523
Fax: +39 02 58 30 3492
E-mail: tvk.info@molgroupitaly.it

POLAND

Ul.Postępu 17D
02-676 Warszawa, Poland
Telephone: +48 22 545 70 70
Fax: +48 22 545 70 60
E-mail: petchem@slovnaft.pl

AUSTRIA

Walcherstrasse 11A, 7.Stock
A-1020 Wien, Austria
Mobile: +43 664 96 33 578
Telephone: +43 1 211 20 1148
E-mail: KatalinHorvath@molaustria.at

FRANCE

Paris, France
Mobile Phone: +33 7 89 86 10 64
Telephone: +33 1 64 32 44 17
E-mail: iren.husson@molgroupitaly.it

ROMANIA

Str.Danielopolu 4-6
ET1 Sector 1 Cod 014 134
Bucuresti, Romania
Telephone:
+40 21 204 85 00
+40 21 204 85 02
Fax: +40 21 232 10 59
E-mail: petchem@molromania.ro

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HUNGARY

H-3581 Tiszaújváros,
P.O. Box: 20, Hungary
Mobile: + 36 30 447 4441
Fax: +36 1 8877 647
E-mail: polymersales@mol.hu

UKRAINE

04053 Kiev
Sichovykh Striltsiv str. 50, 5th floor, office 5-B, Ukraine
Tel.: +380 44 374 00 80 | +380 67 463 58 69
Fax: +380 44 374 00 90
E-mail: Jzavojko@mol-ukraine.com.ua

OTHER EUROPEAN COUNTRIES

Telephone:
+36 20 506 6572
+36 70 373 9209
E-mail: polymersales@mol.hu

SLOVAKIA AND CZECH REPUBLIC

Vlčie hrdlo 1
824 12 Bratislava, Slovak Republic
Telephone:
+421 2 5859 5426
+421 2 5859 5431
+421 2 5859 5429
+421 2 5859 5428
E-mail: predajpolymerov@slovnaft.sk

CROATIA, SLOVENIA, SERBIA, MONTENEGRO, BOSNIA AND HERZEGOVINA, NORTH MACEDONIA, ALBANIA, KOSOVO

Zadarska 80
HR-10000 Zagreb, Croatia
Telephone: +385 1 6160 637
Fax: +385 1 6160 601
E-mail: polymersales@tifon.hr

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