

# TECHNICAL DATA SHEET

## TIPELIN 7100S

### HDPE for non-pressure pipe and sheet

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

#### DESCRIPTION

**TIPELIN 7100S** is a high density bimodal polyethylene copolymer (with butene-1 as comonomer) intended for sheet extrusion and blow moulding of products with high stiffness, excellent environmental stress crack resistance, full notched creep behavior. The grade contains antioxidants and acid scavengers.

#### APPLICATIONS

**TIPELIN 7100S** is recommended for the extrusion of sheets of industrial parts and for non-pressure pipe extrusion.

**TIPELIN 7100S** is suitable for food contact, for manufacturing of toys. The product complies with Food Contact and Toy Safety Regulations.

#### PROPERTIES

	Test method	Unit	Typical value
Melt Mass-Flow Rate (MFR) (190 °C /2.16 kg)	ISO 1133-1	g/10 min	0.12
Melt Mass-Flow Rate (MFR) (190 °C /5 kg)	ISO 1133-1	g/10 min	0.50
Melt Mass-Flow Rate (MFR) (190 °C /21.6 kg)	ISO 1133-1	g/10 min	13
Density (23 °C) *	ISO 1183-2	kg/m <sup>3</sup>	949
Tensile Strength at Yield *	ISO 527-3	MPa	27
Tensile Strength at Break *	ISO 527-3	MPa	31
Tensile Strain at Yield *	ISO 527-3	%	12
Tensile Strain at Break *	ISO 527-3	%	1500
Flexural modulus*	ISO 178	MPa	1100
Izod Impact Strength (notched, 23 °C)*	ISO 180/A	kJ/m <sup>2</sup>	15
Vicat Softening Temperature *	ISO 306/A 120	°C	126
Shore D Hardness *	ISO 868	-	63
OIT (200 °C) *	EN 728	min	118

Typical properties, not to be used as specification.

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

#### PROCESSING

**TIPELIN 7100S** can be used in conventional extrusion machines.

Recommended processing temperatures are 190-210°C.

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## STORAGE AND HANDLING

Pellets are packed in 25 kg PE-LD bags and transported on stretch or shrink-wrapped pallets at eligible load of polymer 1375 kg. Heat treated pallets are available as well. 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. Transportation in a road silo or rail silo is also available. For more detailed information please contact SLOVNAFT and MOL Petrochemicals sales representative.

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 TIPELIN does not contain any substances specifically identified as SVHC at levels greater than 0.1%.

## SAFETY

See MSDS

## RECYCLING

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

## 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

Fax: +36 49 886 491

[E-mail: pts@mol.hu](mailto: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](mailto:polymersales@molgermany.de)

##### AUSTRIA

Walcherstrasse 11A, 7.Stock

A- 1020 Wien, Austria

Telephone: +43 1 211 20 1120

Fax: +43 1 211 20 1198

E-mail: [JHauk@molaustria.at](mailto:JHauk@molaustria.at)

##### 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](mailto:tvk.info@molgroupitaly.it)

##### FRANCE

Paris, France

Mobile Phone: + 33 7 89 86 10 64

Telephone: + 33 1 64 32 44 17

E-mail: [iren.husson@molgroupitaly.it](mailto:iren.husson@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](mailto:petchem@slovnaft.pl)

##### 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](mailto:petchem@molromania.ro)

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#### HUNGARY

H-3581 Tiszaújváros,  
P.O. Box: 20  
Hungary  
Telephone: +36 49 531 928  
Fax: +36 1 8877 647  
E-mail: [polymersales@mol.hu](mailto:polymersales@mol.hu)

#### UKRAINE

04073 Kiev  
Stepana Bandery ave., 23, 7th floor, of. 305,  
Ukraine  
Telephone:  
+380 44 374 00 80  
+380 67 463 58 69  
Fax: +380 44 374 00 90  
E-mail: [JZavojko@mol-ukraine.com.ua](mailto:JZavojko@mol-ukraine.com.ua)

#### OTHER EUROPEAN COUNTRIES

Telephone:  
+36 20-506-6572  
+36 70 373 9209  
Fax: +36 1 8877 647  
E-mail: [polymersales@mol.hu](mailto:polymersales@mol.hu)

#### SLOVAKIA AND CZECH REPUBLIC

Vlčie hrdlo 1  
824 12 Bratislava, Slovak Republic  
Telephone:  
+ 421 2 5859 7515  
+ 421 2 5859 7622  
+ 421 2 5859 7741  
+ 421 2 5859 7231  
E-mail: [polymersales@slovnaft.sk](mailto:polymersales@slovnaft.sk)

#### CROATIA, SLOVENIA, SERBIA, MONTENEGRO, BOSNIA AND HERZEGOVINA, FYR MACEDONIA, ALBANIA, KOSOVO

Zadarska 80 HR-10000 Zagreb, Croatia  
Telephone: +385 1 6160 600  
Fax: +385 1 6160 601  
E-mail: [polymersales@tifon.hr](mailto:polymersales@tifon.hr)

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