TECHNICAL DATA SHEET

POLYPROPYLENE TIPPLEN R 660

Random copolymer for extrusion applications

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

DESCRIPTION

TIPPLEN R 660 is a random copolymer polypropylene for extrusion. This grade is formulated with a new generation clarifying agent, so the product shows excellent optical properties (transparency and gloss).

APPLICATIONS

TIPPLEN R 660 is recommended for blow moulded bottles for detergents, toiletries and flat mineral water, where the higher gas permeability than PVC and PET is no problem. This grade is well suited for extruded sheet for stationery folder and thermoforming articles.

PRODUCT COMPLIANCE

See DDS.

PROPERTIES

Parameter	Note	Test method	Unit	Typical value
Melt Mass-Flow Rate (MFR) (230 °C /2.16 kg)	-	ISO 1133-1	g/10 min	2
Tensile Strain at Yield	(1)	ISO 527-1,2	%	13
Tensile Stress at Yield	(1)	ISO 527-1,2	MPa	26
Modulus of Elasticity in Tension	(1)	ISO 527-1,2	MPa	950
Flexural Modulus	(1)	ISO 178	MPa	1000
Izod Impact Strength (notched, 23 °C)	(1)	ISO 180/A	kJ/m²	24
HDT (0.45 MPa, flatwise)	(1)	ISO 75-1,2	°C	86
Rockwell Hardness	(1)	ISO 2039-2	R scale	73
Haze	(2)	ISO 14 782	%	15

Typical properties, not to be used as specification.
(1) Average mechanical property values of several measurements carried out on standard injection-moulded test specimens prepared in accordance with ISO 294-1.
(2) Measured on specimen with 1 mm wall thickness

PROCESSING

TIPPLEN R 660 can be used in conventional extrusion machines. Recommended processing temperatures are 185-230 °C.

MOLGROUP CHEMICALS

TECHNICAL DATA SHEET

POLYPROPYLENE TIPPLEN R 660

Random copolymer for extrusion applications

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

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. Transportation in road silo or rail silo is also available. For more detailed information please contact a sales representative at SLOVNAFT or at MOL Petrochemicals.
Since polypropylene 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 polypropylene 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 PP TIPPLEN does not contain any substances specifically identified as SVHC at levels greater than 0.1%.

RECYCLING

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

SAFETY

See MSDS.

Flammability measurement according to TL1010(2008) burning rate 35 mm/min (after 24 hours at 23 ◦C) and 29 mm/min (after 168 hours at 80 ◦C), measured on press moulded specimens (size 350 x 100 x 2 mm).

DISCLAIMER

MOLGROUP CHEMICALS

TECHNICAL DATA SHEET

POLYPROPYLENE TIPPLEN R 660

Random copolymer for extrusion applications

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

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

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

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

FRANCE

Paris,France
Mobile Phone: +33 7 89 86 10 64
Telephone: +33 1 64 32 44 17
E-mail: 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

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

MOLGROUP CHEMICALS

TECHNICAL DATA SHEET

POLYPROPYLENE TIPPLEN R 660

Random copolymer for extrusion applications
TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

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

Last revision: September/2021

MOLGROUP CHEMICALS