

TWO COLOURS



ONE DIRECTION

Polypropylene  
**TIPPLEN H 649 FH**  
Homopolymer for BOPP film

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### Description

**TIPPLEN H 649 FH** is a homopolymer polypropylene for the production of biaxially oriented films. The grade contains reinforced processing stabilisation but does not contain any slip or antiblocking agents.

### Applications

**TIPPLEN H 649 FH** is Ca-stearate free is particularly suitable for metallization both in monolayer and in coextruded structures. BOPP films made from **TIPPLEN H 649 FH** have good mechanical properties, high impact strength and puncture resistance even at low temperatures.

The BOPP film forms an excellent barrier against moisture, oils and oxidation and features good optical properties. Monolayer or coextruded films with a thickness range of 0.01 – 0.04 mm are used for packaging.

**TIPPLEN H 649 FH** is suitable for food contact and for manufacturing of pharmaceutical packing products. The product complies with Food Contact and Pharmaceutical Regulations.

### Properties

	Test method	Unit	Typical value
MFR (230 °C /2.16 kg)	ISO 1133	g/10 min	2.5
Flexural modulus *	ISO 178	MPa	1700
Modulus of Elasticity in Tension *	ISO 527-1,2	MPa	1600
Tensile Strength at Yield *	ISO 527-1,2	MPa	34.5
Tensile Strain at Yield *	ISO 527-1,2	%	10.5
Izod Impact Strength (notched, 23 °C) *	ISO 180/1A	kJ/m <sup>2</sup>	5
HDT (0.46 N/mm <sup>2</sup> ) *	ISO 75-1,2	°C	97
Rockwell Hardness *	ISO 2039/2	R scale	96

Typical properties, not to be used as specification.

\* Average mechanical property values of several measurements carried out on standard injection-moulded test specimens prepared in accordance with ISO 1873-2.

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### Processing

**TIPPLEN H 649 FH** can be used in conventional and high speed BOPP film extrusion machines. Recommended processing temperature 190 – 240 °C.

### Storage and Handling

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

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. 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, catalysts and most additives have been pre-registered. SPC/TVK is committed to fully respect this new legislation and will only use REACH compliant raw materials. At this point in time SPC/TVK polypropylenes TATREN/TIPPLEN do not contain any substances specifically identified as SVHC at levels greater than 0.1%.

### Safety

See MSDS.

### Recycling

Polypropylene resins are suitable for recycling using modern methods of shredding and cleaning.

In-house production waste should be kept clean to facilitate direct recycling.

### Disclaimer

The information provided in this publication has been compiled to the best of our present knowledge. However, in view of the various applications of polypropylene resins and the equipments used, the processing conditions may differ.

The recommendations and data herein are to be construed as informative only and do not relieve users from carrying out their own tests and experiments prior to processing in order to check suitability for a specific use. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed. Our products are under continuous development, therefore we reserve the right to change the information presented in this brochure at our own discretion.

The REACH statement herein does not constitute legal advice. The REACH statement is provided for informational purpose only.

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June 2009

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