

# TECHNICAL DATA SHEET

## POLYPROPYLENE TIPPLEN K 695

Impact copolymer for extrusion applications

TIPLEN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

### DESCRIPTION

TIPPLEN K 695 is a high molecular weight impact copolymer polypropylene for the blow and cast film extrusion and injection moulding applications.

### APPLICATIONS

TIPPLEN K 695 is recommended for medium-low weight corrugated cardboards, blow moulded bottles and for cast and blown film and thermoforming sheets. This grade is also recommended for heavy-duty packaging and large containers.

### 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     | %                     | 7.7           |
| Tensile Stress at Yield                     | (1)  | ISO 527-1,2     | MPa                   | 27            |
| Modulus of Elasticity in Tension            | (1)  | ISO 527-1,2     | MPa                   | 1370          |
| Flexural Modulus                            | (1)  | ISO 178         | MPa                   | 1400          |
| Izod Impact Strength (notched, 23 °C)       | (1)  | ISO 180/A       | kJ/m <sup>2</sup>     | 18            |
| Izod Impact Strength (notched, -20 °C)      | (1)  | ISO 180/A       | kJ/m <sup>2</sup>     | 6             |
| HDT (0.45 MPa, flatwise)                    | (1)  | ISO 75-1,2      | °C                    | 115           |
| Rockwell Hardness                           | (1)  | ISO 2039-2      | R scale               | 79            |
| Film quality                                | -    | Internal method | defect/m <sup>2</sup> | 0-300         |

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.

### PROCESSING

TIPPLEN K 695 can be used in conventional extrusion and injection moulding machines. Recommended processing temperatures are 190-240 °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. 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.

### DISCLAIMER

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