

# TECHNICAL DATA SHEET

## TIPOLEN FA 244-51

### LDPE for film

TIPELIN / TIPOLEN / TIPPLEN / TATREN / BRALEN+

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

### DESCRIPTION

**TIPOLEN FA 244-51** is a film grade of low density polyethylene. It contains 1% n-butyl-acrylate as a comonomer. It has good molten stability and excellent processability. The films made of this grade have excellent mechanical and optical properties. The grade does not contain any additives.

### APPLICATIONS

**TIPOLEN FA 244-51** is intended for manufacturing of heavy duty bags, agricultural films, silage films, shrink films, carrier bags, packaging films, household films, films for laminating in thickness 0.07-0.16 mm, blow moulded products, bottles.

**TIPOLEN FA 244-51** is suitable for food contact, for manufacturing of pharmaceutical packing products and toys. The product complies with Food Contact, Pharmaceutical 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	0.30
Density (23 °C) *	ISO 1183-2	kg/m <sup>3</sup>	920
Tensile Strength **	ISO 527-1,3	MPa	20/19
Tensile Strain at Break **	ISO 527-1,3	%	340/550
Vicat Softening Temperature*	ISO 306/A120	°C	92
Drat Drop **	ISO 7765-1 method A	g	280
Shore D Hardness*	ISO 868	-	49
Haze **	ISO 14 782	%	12
Recommended Thickness		mm	0,07-0,16

Typical properties, not to be used as specification.

\*Density, Vicat Softening Temperature and Shore D Hardness have been measured on standard pressed specimens (ISO 293) conditioned at room temperature (ISO 291)

\*\*Properties on film in M.D./T.D. - thickness of 0.07 mm (MFR=0.3 g/10min) and 0.04 mm (MFR more than 0.3 g/10min), blow up ratio 2:1

### PROCESSING

**TIPOLEN FA 244-51** can be used in conventional extrusion machines.

Recommended processing temperatures are 170-190°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 TIPOLEN 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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