

Low Density Polyethylene ROPOTEN®

Specification

№	Property	Unit	Value by grade			Test method
			FB-7-104	FV-2-109 FV-2-109-3	OV-03-110	
1.	Melt flow rate at 190 °C and loading 2,16 kg min-max	g/10 min	5,90 – 8,00	1,70 – 2,30	0,20 – 0,40	ASTM D 1238 BDS EN ISO 1133
2.	Density at 23 °C min	kg/m ³	915	917	919	BDS EN ISO 1183
3.	Tensile strength min	MPa	10,0	12,0	15,5	ASTM D 638 BDS EN ISO 527-1
4.	Relative elongation at break min	%	500	500	560	ASTM D 638 BDS EN ISO 527-1
5.	Haze max	%	16,0	12,0	–	ASTM D 1003
6.	Vicat softening point min	°C	80	–	90	ASTM D 1525
7.	Volatile compounds max	% (m/m)	0,07	0,07	0,07	BDS 10086-82
8.	Impurities in 200 g sample max	piece	5	5	10	BDS 10086-82
9.	Off-spec granules max	%	1,7	1,7	1,7	BDS 10086-82
10.	Cold resistance max	°C	– 40	–	– 60	BDS 10086-82

Remarks:

- Parameter "Vicat softening point" for grade OV-03-110 is determined for each particular lot, whereas for the other grades it is guaranteed by the manufacturer. It is determined periodically, at least on two lots per quarter.
- Parameter "Cold resistance" for grades FB-7-104 and OV-03-110 is guaranteed by the manufacturer. It is determined periodically, at least on two lots per quarter.

Product description

Solid product in the form of granules with length ranging from 2 to 6 mm, natural colour, odourless. The product is stable in normal storage and handling conditions.

Application

Grades **FB-7-104**, **FV-2-109** and **FV-2-109-3** are used for production of agricultural film, film for building and machine-building applications, for production of toys, souvenirs, for production of thin film for small packages, etc.
Grade **OV-03-110** is used for production of household articles, bottles, machinery components and household appliances, pipes, souvenirs, etc.

Production method

Polymerization of ethylene in autoclave reactors at high pressures and medium temperature in the presence of initiators – organic peroxides.

Packaging and marking

The product is packed in 25 kg polyethylene bags (milky white or natural colour).
Each bag is marked with: product grade, lot number and date of production.

Storage

In dry, covered warehouse premises, protected from direct sunlight, away from all sources of heat. Open-air storage is possible for a short period of time.

Transportation

Covered, clean and dry vehicles, protected from moisture, mechanical damages and pollution.