

## ● LDPE

GOST 16337-77, rev. 1-3

Production method: low density polyethylene is produced by high pressure ethylene polymerization in tubular reactors and reactors with agitator using of radical initiators.

Application: for production of bags, pipes, fittings, articles designed for food contact, toys, films and film articles, shaped-molded parts etc.

No.	Parameter	Standard for the grade											
		10803-020			11503-070			15313-003			15813-020		
		S/q	1st/q	2nd/q	S/q	1st/q	2nd/q	S/q	1st/q	2nd/q	S/q	1st/q	2nd/q
1	Density, g/cm <sup>3</sup>	0,9185±0,0015			0,9180±0,001			0,9205±0,0015			0,9190±0,002		
2	Melt Flow Index (rating value with tolerance)	2,0±10	2,0±15		7,0±15			0,3±30			2,0±25		
3	Spread of melt flow index in one batch, %, max	±5	±8	±12	±5	±10	±12	±6	±12	±15	±6	±12	±15
4	Number of impurities, pcs, max	2	5	15	2	5	10	2	8	30	2	8	30
5	Tensile yield point, Pa (kgf/cm <sup>2</sup> ), min	93x10 <sup>5</sup> (95)			93x10 <sup>5</sup> (95)			98x10 <sup>5</sup> (100)			93x10 <sup>5</sup> (95)		
6	Tear strength, Pa (kgf/cm <sup>2</sup> ), min	122x10 <sup>5</sup> (125)			98x10 <sup>5</sup> (100)			137x10 <sup>5</sup> (140)			113x10 <sup>5</sup> (115)		
7	Elongation at break, %, min	550			450			600			600		
8	Cracking resistance, hr, min	2			—			500			—		
9	Mass fraction of extractable substances, %, max												
	Superior quality 1st and 2nd qualities	0,9 1,1			1,2 1,2			0,4 0,6			0,4 0,6		
10	Film appearance testing:												
	Superior quality:	B			B			A or B			A or B		
	1st quality: 2nd quality:	B C			B C			B C			B C		
11	Odor and taste of aqueous extracts, in points, max	1											

Safety requirements, acceptance procedure, testing methods, package, labeling, transportation, and storage are in accordance with GOST 16337-77. Packaging in polyethylene bags, special soft containers etc. Carriage: by all modes of transport in accordance with the transportation rules.



LDPE of 15313-003 Grade is the winner of "The 100 Best Russian Products of 2010" Republican Contest



LDPE of 11503-070 UUP Grade is the winner of "The 100 Best Russian Products of 2006, 2007" Contest and the winner of "The 100 Best Russian Products of 2006, 2007" Republican Contest



LDPE of 11503-070 Grade is the winner of "The 100 Best Russian Products of 2002" and the winner of "The 100 Best Russian Products of 2002" Republican Contest