

**LOW DENSITY POLYETHYLENE**  
**(grades 10303-003, 10903-020, 12203-250, 12903-003)**

Low density polyethylene (grades 10303-003, 10903-020, 12203-250, 12903-003) is manufactured as per TU BY 300042199.135.

Intended for manufacture:

- household articles, packaging (closures), food contacting products;
- toys;
- medical application articles, packaging (closures) of medicines;
- super concentrates of pigments and other filled compositions used as polymer base.

**TECHNICAL CHARACTERISTICS**

Parameter	Norm for the grade, highest quality			
	10303-003	<b>10903-020</b>	12203-250	12903-003
Size of pellets in any direction, mm	2-5	2-5	2-8	2-5
Mass fraction of pellets, %, not more:				
Larger than 8 - 10 mm (including the pellets of irregular shape)	-	-	1,0	-
Larger than 5 - 8 mm	0.25	0.25	-	0.25
Larger than 1 - 2 mm	0.5	0.5	0.5	0.5
Mass fraction of substances of irregular shape, %, not more	Not allowed	Not allowed	-	Not allowed
Mass fraction of pellets of different shade, %, not more	Not allowed	Not allowed	Not allowed	Not allowed
Mass fraction of grey and oxidized pellets, %, not more	Not allowed	Not allowed	Not allowed	Not allowed
Density, g/cm <sup>3</sup>	0.9205±0.0015	0.9185±0.0015	0.9160±0.002	0.919±0.002
Melt flow index (nominal value) with tolerance, %, g/10 min	0.3±15	2.0±10	25.0±20	0.3±15
Melt flow index dispersion within lot limits, % , not more	±5	±5	±5	±5
Number of inclusions, pcs, not more	2	2	2	2
Film appearance on process sample	C	B	-	C
Cracking resistance under stress, hr., not less	500	4	-	1000
Tensile yield point, Pa, not less	98·10 <sup>5</sup>	85·10 <sup>5</sup>	-	93·10 <sup>5</sup>
Tensile strength, Pa, not less	137·10 <sup>5</sup>	115·10 <sup>5</sup>	-	137·10 <sup>5</sup>
Relative elongation at rupture, %, not less	600	500	-	550
Extractive substances content, %, not more	0.7	0.9	1.4	0.9
Smell and smack of aqueous extracts, score, not higher	1	1	1	1