

LDPE of FA 2004 grade

Application (purpose): Low density polyethylene of FA2004 grade is produced in autoclave reactor and intended for production of film and other articles as well as processing by injection molding and extrusion.

No	Parameter	Grade specifications			Test frequency
		Extra grade	1 grade	2 grade	
1.	Density g/cm ³	0.917 - 0.922			One lot per quarter minimum
2.	MFI limits, g/10 min	0.25 - 0.49			For each lot
3.	Melt flow index spread within a batch, %, maximum	+/- 6	+/- 10	+/- 15	For each lot
4.	Tensile yield strength, Pa, minimum	9.5			One lot per quarter minimum
5.	Tensile stress at break, MPa, minimum	13.0			-//-
6.	Elongation at break, %, minimum	500			-//-
7.	Crack propagation resistance, h, minimum	500			-//-
8.	Extractable substances	0.8			-//-
9.	Film appearance	B	B	C	At least for 1 batch quarterly
10.	Number of inclusions, psc, maximum	2	5	15	For each lot
11.	Gray and oxidized pellets, % wt	none			For each lot
12.	Pellets, %, maximum - from 5 up to 8 mm - from 1 up to 2 mm	0.25 0.5			For each lot
13.	Odor and taste of aqueous extractables, points, maximum	1			One lot per quarter minimum

Note: 1. In case of non-conformance of film appearance of FA2004 to specifications this PE can be used for other purposes and the grade is determined based on quality parameters.

2. The results of periodic tests specified by the Technical Assignment for "Production of Low Density Polyethylene of FA2004 grade" and approved on 16.01.2018 with revisions no. 1, 2 are applicable to all batches of the polyethylene produced within one quarter.

Occupational, health and ecological safety requirements: LDPE of FA2004 grade doesn't emit any toxic substances to the environment at ambient temperature as well as is non-harmful for human at direct contact. It doesn't require any special precautions. On debagging and mechanical processing of polyethylene a fine dust formation is possible. On heating at processing with temperature exceeding 140 °C the volatile products of thermooxidative degradation can evaporate. These products include organic acids, carbonyls, such as phormaldehyde, acetaldehyde, carbon oxide and nitrogen oxide. Solid residuals which form at processing of PE are non-toxic, don't require any neutralization and are subject to further processing.

Storage, transportation, labelling, packing and tare requirements: LDPE of FA2004 grade is packed into PE bags assuring product's quality and preservation as per reference documentation approved in appropriate order.

Labelling – FA2004 polyethylene.

Transportation of LDPE of FA2004 grade is by all transport means as per rules of goods transportation applicable for this mode of transport.