

High Density Polyethylene BF4810

Description:

BF4810 is a high density high molecular weight polyethylene copolymer resin produced through Unipol® process. It shows an excellent dart impact and puncture resistance, high tensile strength, good sealability and an outstanding processing performance.

Application:

Retail bags; perforated rolls; repackaging; bags in general.

Process:

Blown Film Extrusion

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/5)	D 1238	g/10 min	0.45
Melt Flow Rate (190/21.6)	D 1238	g/10 min	10
Density	D 792	g/cm ³	0.948

Typical Properties:

Blown Film Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	60/50
Elongation at Break (MD/TD)	D 882	%	575/819
Tensile Strength at Yield (MD/TD)	D 882	MPa	20/30
Dart Drop Impact	D 1709	g/F50	99
Elmendorf Tear Strength (MD/TD)	D 1922	gF	14/105
Puncture Strength	Braskem Method	J/m	70
Sealing Initial Temperature	Braskem Method	°C	125

(a) Film with 12,5 micra produce in a 75mm extruder with 1,3 mm of die gap and a blow-up ratio of 4.5:1. (MD = extrusion direction and TD = transversal direction).

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA.
2. The information presented in this Data Sheet reflects typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 25087-34-7.
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. Braskem does not recommend this grade for packages, parts or any kind of product manufacture that will be used for storage or contact with solution that will have internal contact with human body.
8. Braskem polyolefin products do not have additives with metals or other substances on purpose of oxidegradation. These additives and the decomposition and disintegration of polyolefins caused by oxidegradation phenomenon can cause environmental pollution, decrease the package performance and increase migration of package constituent to food, compromising resin approval regarding the requirements of Anvisa Resolution 105/99. The use of these additives with Braskem polyolefin products implies immediate loss of performance guarantee described in this data sheet.
9. The content of this Data Sheet replaces previous revisions published for this product.
10. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.