

High Density Polyethylene SHE150

Description:

SHE150 resin is a High Density Polyethylene, copolymer of **butene-1**, produced by Spherilene process. It has been specially designed for monofilament extrusion process and provides a good balance of processability, spinnability, knotting strength as well as a very low gels amount. It can also be blended with LLDPE to improve blown film stiffness. It contains processing aid and antioxidant additives.

The minimum biobased content of this grade is 94.5%, determined according to ASTM D6866.

Application:

Raschel; shading and protecting nets; ropes.

Process:

The optimum processing conditions vary with the type of equipment used in the production.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	1.0
Density	D 792	g/cm ³	0.948

Typical Properties:

Plaque Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Yield	D 638	MPa	28
Tensile Strength at Break	D 638	MPa	40
Flexural Modulus – 1% Secant	D 790	%	1280
Shore D Hardness	D 2240	-	62
Deflection Temperature under Load at 0.455 MPa	D 648	°C	76
Vicat Softening Temperature at 10 N	D 1525	°C	128

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

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. Unless specified, Braskem does not recommend the use of this grade for the fabrication of packages, parts or any other type of product designed to medical and/or pharmaceutical applications.
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.