

High Density Polyethylene AC59

Description:

AC59 resin is a High Density Polyethylene, homopolymer, produced by solution process, designed for monofilament applications. It contains antioxidant additives.

Applications:

Film extrusion; monofilament; raffia; raschel; nets; oriented structures; general use.

Process:

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

- Oriented Structures

cast film - typical temperature profile: 170 to 220°C.

blown film - typical temperature profile: 170 to 220°C.

monofilament - typical temperature profile: 170 to 220°C.

Typical Stretch Ratio: 4 to 8:1.

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.75
Density	D 792	g/cm3	0.960

Typical Properties:

Plaque Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Yield	D 638	MPa	28
Elongation at Yield	D 638	%	11
Tensile Strength at Break	D 638	MPa	35
Elongation at Break	D 638	%	2036
Flexural Modulus – 1% Secant	D 790	%	1180
Shore D Hardness	D 2240	-	59
Izod Impact Strength	D 256	J/m	175
Deflection Temperature under Load at 0.455 MPa	D 648	°C	72
Vicat Softening Temperature at 10 N	D 1525	°C	127

(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 Application Engineering.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. Cas Registry number: 9002-88-4.
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. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.

