

**Polypropylene RP 647**

**Sub-group:**

Random Copolymer

**Description:**

RP 647 is a propylene-ethylene random copolymer of low melt index designed for blow molding, sheet extrusion and thermoforming. This non-toxic product presents good processability, excellent melt strength, good stiffness/impact strength and outstanding clarity. It also features low odor and flavor transfer.

**Applications:**

High transparency thermoformed sheets for general packaging  
High transparency thermoformed packaging  
Packaging for foodstuff, cosmetics and cleaning products  
Returnable bottles for mineral water

**Process:**

Extrusion  
Thermoforming  
Blow Molding

**Control Properties:**

	ASTM Method	Units	Values
Melt Index (230°C/2.16kg)	D-1238-L	g/10 min	1,7

**Plaque Properties <sup>a</sup>:**

	ASTM Method	Units	Values
Density (23°C)	D-792A	g/cm <sup>3</sup>	0,902
Flexural Modulus	D-790	GPa	1,05
Tensile strength at yield	D-638	MPa	29
Elongation at yield	D-638	%	15
Rockwell Hardness	D-638	MPa	68
Notched IZOD impact strength at 23°C	D-256-A	J/m	338
Notched IZOD impact strength at -20°C	D-256-A	J/m	17
Heat deflection temperature (HDT) at 1820kPa	D-648	°C	51
Heat deflection temperature (HDT) at 455kPa	D-648	°C	78
Vicat softening temperature -1kg	D-1525	°C	129

a) Tests made in injection molded plates according to ASTM D-4101 classification.

**Final Remarks:**

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – *Food and Drugs Administration*. The additives present are covered in appropriate regulation by FDA.
2. These informations reflect 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: 9003-07-0.
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 oxi-degradation. These additives and the decomposition and disintegration of polyolefins caused by oxi-degradation 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.