CLEARTUF 8006

January 2024 | Polyethylene Terephthalate (PET) | Data sheet

DESCRIPTION

CLEARTUF 8006 Polyester Resin is a TPA-based polythylene terephthalate copolymer resin designed for a wide range of bottle applications. It is a high weight polymer with a 0.80 intrinsic viscosity (IV).

CLEARTUF 8006 Polyester Resin is designed to provide highly desirable container properties. These include high clarity and sparkle, high strength and toughness, and good barrier properties. **CLEARTUF 8006** Polyester Resin is designed with a special catalyst and stabilizer system that offers retentin during processing. This superior stability also enables use of the required drying conditions without affecting color or molecular weight.

The followin table provides the parameters that characterize the grade. Some parameters are show with values that are specified to fall within certain limits. Other parameters are show as a single value that we regard as typical of the grade. Minor differences around this typical value will not detract from the performance of the product. All parameters are measured under laboratory conditions, by the M&G analytical method shown. Different methods or conditions of analysis may give different values. Purchased material may be accompanied by a Certificate of Analysis or other document, confirming that the product is within specified limits and is consistent with the other values for the stated parameters.

PARAMETER	UNIT	VALUE	LIMITS	TEST METHOD
Intrinsic viscosity (IV)	dl/g	0.80	±	M&G/QC-01
Acetaldehyde content	ppm	2	Max	M&G/!C-03
Color (L*-value)	--	75	Min	M&G/QC-02
Color (b*-value)	--	1.0	Max	M&G/QC-02
Melting point +	°C	253	±5	M&G/QC-06
Foreign particles	--	None	--	Visual Detection

+ moitored on feed resin only

REGULATORY STATUS

CLEARTUF 8006 Polyester Resin is suitable for the manufacture of articles for numerous food packaging applications. Since food packaging regulations differ from country to country, for information about the regulatory status within the United States, Mexico, Europe, or Latin America, please contact your local account manager.

Supply Companies
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IMPORTANT ASPECTS OF USE IN PROCESSING

Drying

Thermoplastic polyesters such as **CLEARTUF 8006** Polyester Resin can undergo hydrolisis if moisture is not eliminated prior to injection moldin leading to a decrease in molecular weight and loss in mechanical properties of the bottle, particularly on top load performance and impact strength. Moisture content of the resin must be reduced to a level of 0.003% (10ppm) or less, prior to melt processing. Drying is best accomplished in a continuos high heat dehumidifying type air hopper dryer with a regenerative desiccant bed usin -40˚F(-40˚C), 4-6 hours residence time and a minimum air flow rate of 1.0 ft3 per minute per pound of polymer consumed per hour.

Injetion molding and stretch blow molding

Injection moldin temperatures should be maintained at the minimum level needed to produce clear quality preforms, In addition to temperature limits, care should be taken to avoid excessive shear during injection. Typical processing temperatures are generally between 20ºC and 40ºC hotter than the melting point parameter indicated on the front of this data sheet, largely dependant upon injection barrel dynamics such as residence time and shear. When stretch blow moldin, preforms shoud be heated to minimun levels needed to produce clear, quality biaxially oriented containers. Typical preform surface temperatures are generally betwwen 90ºC to 105ºC, largely dependant upon the equipment setup and afficiendy.

SAFETY ASPECTS

Drying

Please read the **Safety Data Sheet** written for this product. It may be obtained from your **CLEARTUF** account manager.

- **Drying**

  CLEARTUF 8006 Polyester Resin presents no toxic hazards, either from skin contact or inhalation, under normal conditions. Contact with melted polymer should be avoided. Product in bags must not be stacked.
- **Fire precautions**

  In common with most other organic polymers, PET polymers will burn. They are difficult to ignite, but are defined as ´combustible´ but not ´highly flammable´. Reasonable precautions should be taken to ensure absence of sources of ignition in warehouses and storage areas. If any large quantities are stored, normal good housekeeping should be anforced, icluding freedom from dust, uncluttered acces ways, sprinkler system, etc.

WARRANTY

Drying

All products purchased from or supplied by M&G Polímeros México, S.A. de C.V. and/or Polymers Sales & Logistics, LLC are subject to terms and conditions set out in the contract, order acknowledgment and/or bill of lading. M&G warrants only yhay its product will meet those specifications designated as such herein or in other publications. All other information, including that herein, supplied by M&G is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to deretmine tha product´s suitability for a particular purpose. M&G makes no other warranty either express or implied, regardin such other information, the data upon wich the same is based, or the results to be obtained from the use thereof, that any products shall be merhantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.

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