

Akestra™ 110

Heat resistant plastic

Product Description

Akestra™ 110 is an amorphous copolyester with sparkling glass-like clarity suitable for food packaging containers, sheets and films as well as in durables. It has outstanding features in heat resistance, chemical resistance and hydrolytic stability. Akestra™ has excellent processing properties, is easy to process in standard PET equipment and can be used in most polymer processes like extrusion casting and coating, injection molding. The high melt strength also enables good processability in film blowing and blow molding.

Akestra™ 110 is compatible with PET and can be coextruded with rPET and used in thermoforming of cups for hotfill as a sustainable replacement for PS. Akestra™ 110 is fully miscible with PC and can be used as a processing additive for PC with preserved full transparency. Akestra™ may be used in food contact application and complies both with FDA and EU regulations for direct food contact.

Segment Applications

Food packaging containers, blow molding, sheets and films as well as in durables injection molding articles.

Delivery Forms

20 kg bags and 1000kg Big Bags.



Akestra™ - Upgrading recycled PET with irresistible resistance

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General Characteristics

Characteristics	Unit	Typical Value ¹	Analytical methods
Specific gravity	g/cm ³	1.24	ASTM D792
Intrinsic Viscosity IV	dl/g	0.64	PO 120-6 ²
Glass transition temperature T _g	°C	110	ASTM D7426
HDT @ 0.455MPa	°C	96	ASTM D648
Total Transmittance	%	90	ASTM D1003
Haze	%	1	ASTM D1003
Flexural Yield Strength	MPa	90	ASTM D790
Flexural Modulus	GPa	2.5	ASTM D790
Elongation at break	%	140	ASTM D638
Izod impact strength, notched	J/m	24	ASTM D256

1. Typical values are for information only and not part of sales specification

2. Analytical method available on request

Compliance and regulations

Akestra™ and/or its monomers are approved as food contact material in Europe (EFSA) and USA (FDA). Akestra™ complies with RoHS. All raw materials are REACH registered. A document of compliance is available on request with details about its regulatory and compliances.

General Processing recommendations

Desiccant dryer and/or vented extrusion equipment

Drying Time: 5-8 hours

Max. Drying Temp.: 90 °C

Dew point: < -29 °C

Processing melt temp. 220-270°C

Mold Temperature. 20-60°C

More information are available on request, TI-1800 and TI-1801

Handling and Storage

Akestra™ is hygroscopic and should be handled to prevent moisture absorption.

Keep in closed or covered containers when not in use

Store in cool dry place

Effective date: September 15, 2020

USERS ARE ADVISED TO MAKE THEIR OWN INDEPENDENT DETERMINATION OF THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE. EXCEPT FOR WHAT IS STATED IN PERSTORP'S GENERAL CONDITIONS OF SALE OR SEPARATELY IN A WRITTEN CONTRACT WITH PERSTORP, NO INFORMATION PROVIDED IN THIS DATA SHEET CONSTITUTES A WARRANTY (EXPRESS OR IMPLIED) BY PERSTORP, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.