

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 with EU and US FDA 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
850 kg sealed big bags
900 kg sealed big bags



Akestra™ - Upgrading recycled PET with irresistible resistance

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Sales Specification

Characteristics	Unit	Specification	Analytical Method
Intrinsic Viscosity IV	dl/g	0.62-0.67	PO 120-6 ¹
Glass transition temperature T _g	°C	Min. 105	ASTM D7426

1. Internal analytical method available on request

General Characteristics

Characteristics	Unit	Typical Value ²	Analytical Method
Specific gravity	g/cm ³	1.24	ASTM D792
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

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

Compliance and regulations

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

General Processing recommendations

Desiccant dryer and/or vented extrusion equipment

Drying Time: 6-9 hours

Max. Drying Temp.: 85°C

Dew point: < -30°C

Processing melt temp. 220-270°C

Mould Temperature: 20-60°C

More information are available on request, TI-1800 and TI-18001

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: May 17, 2024

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