

# Akestra™ 90

## Heat resistant plastic

### Product Description

Akestra™ 90 is an amorphous copolyester with sparkling glass-like clarity. It has outstanding features in heat resistance, chemical resistance and hydrolytic stability.

The Akestra™ copolyesters have excellent processing properties, is easy to process in standard PET equipment and can be used in most polymer processes like, extrusion casting and coating, and injection molding. The high melt strength of Akestra enables good processability also in film blowing and extrusion blow molding. The combination of high melt strength and a broad processing window makes Akestra™ 90 an excellent carrier in master batches for polyesters since it is fully miscible with PET and PETG giving full transparency in all concentrations. Akestra™ may be used in food contact application and complies both with FDA and EU regulations for direct food contact.

### Segment Applications

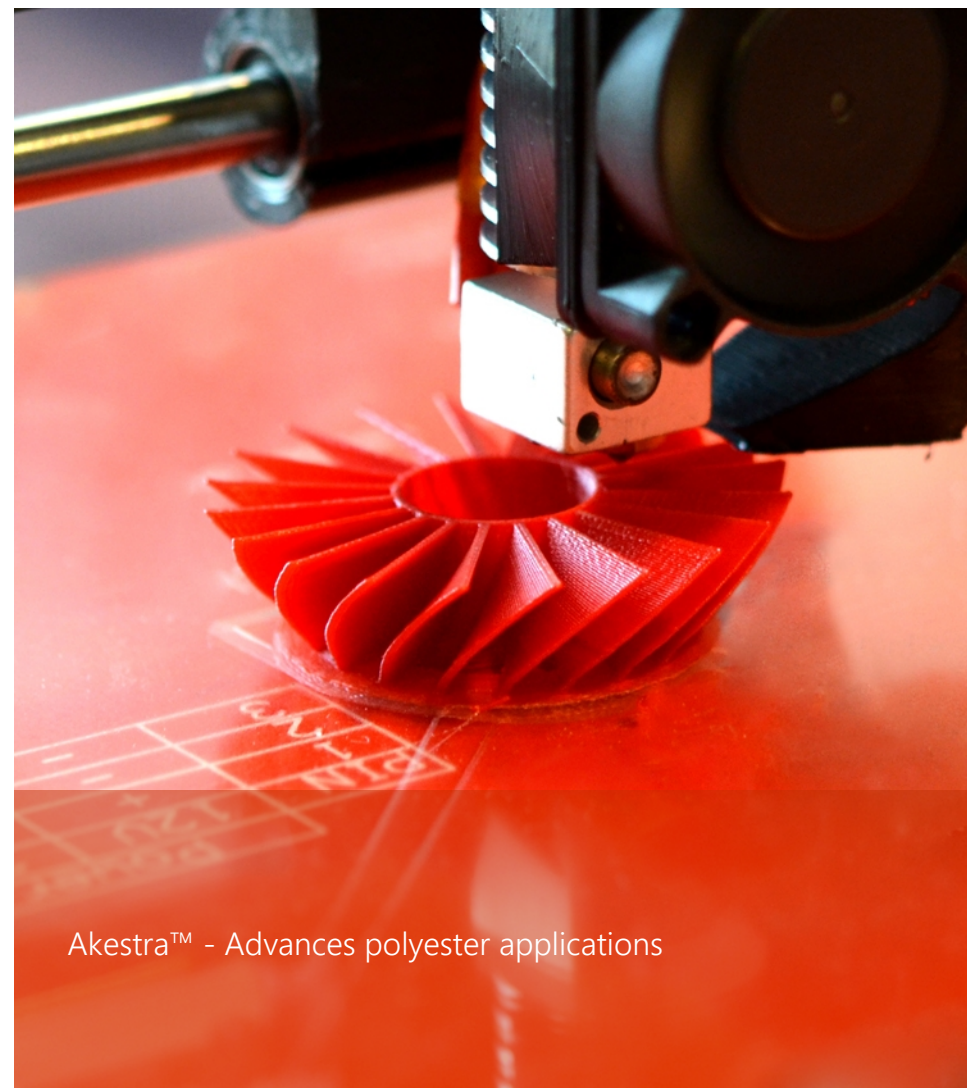
Carrier for masterbatch, Food packaging containers, blow molding, sheets and films as well as in durables injection molding articles.

### Delivery Forms

20 kg bags

1000 kg normal big bags

900 kg sealed big bags



Akestra™ - Advances polyester applications

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### General Characteristics

| Characteristics                 | Unit              | Typical Value <sup>1</sup> | Analytical Method     |
|---------------------------------|-------------------|----------------------------|-----------------------|
| Specific gravity                | g/cm <sup>3</sup> | 1.28                       | ASTM D792             |
| Intrinsic Viscosity IV          | dl/g              | 0.64                       | PO 120-6 <sup>2</sup> |
| Glass transition temperature Tg | °C                | 95                         | ASTM D7426            |
| HDT @ 0.455MPa                  | °C                | 81                         | ASTM D648             |
| Total Transmittance             | %                 | 91                         | ASTM D1003            |
| Haze                            | %                 | 1                          | ASTM D1003            |
| Flexural Yield Strength         | MPa               | 89                         | ASTM D790             |
| Flexural Modulus                | GPa               | 2.5                        | ASTM D790             |
| Elongation at break             | %                 | 220                        | ASTM D638             |
| Izod impact strength, notched   | J/m               | 25                         | ASTM D256             |

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

2. Internal 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: 9-12 hours

Max. Drying Temp.: 75°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: May 17, 2024

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.