

Product Data Sheet

Polyethylene

Anteo™ FK1828

BORSTAR® BIMODAL TERPOLYMER LLDPE FOR HIGH PERFORMANCE FLEXIBLE PACKAGING

DESCRIPTION

Anteo™ FK1828 is produced using the proprietary **Borstar®** bimodal terpolymer technology combining outstanding sealing performance with easy processability, good optics and superior mechanical properties. Film made with **Anteo™ FK1828** exhibits unique combination of low seal initiation (SIT), high hot tack force, excellent puncture and tear properties. **Anteo™ FK1828** used in combination with **Borstar® PE / BorShape™ PE / LDPE / PP** products offers best in class high performance transparent flexible packaging solution with potential for down gauging.

Anteo™ FK1828 contains slip, Antiblock, Antioxidant and Processing Aid (PPA).

APPLICATIONS

Lamination	Form Fill Seal (FFS)	Food Packaging
Liquid Packaging	Frozen Food Packaging	Standup Pouch
Agriculture Film	Lamitube	Shrink Film
Multilayer Packaging Film	Stretch Hood	Impact Modifier

KEY FEATURES

Easy Processability	Superior Puncture Resistance	Good Optics
Excellent Mechanical Strength	Balanced Tear Strength	Low COF
Excellent low Temperature Performance	Excellent Organoleptic Properties	
Outstanding Seal Performance (Low SIT, High Hot Tack force and Wide Sealing Window)		

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 Anteo™ is a trademark of the Borealis group

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PHYSICAL PROPERTIES

Property	Typical Value*	Unit	Test Method
Density	918	kg/m ³	ASTM D 792
Melt Flow Rate MFR (190°C/2.16 kg)	1.5	g/10min	ASTM D1238
Melting Temperature	122	°C	ISO 11357/03
Vicat Softening Point	102	°C	ASTM D 1525

* Typical properties and data should not be used for specification work

FILM PROPERTIES

Anteo™ FK1828 film properties are measured on 40 micron blown film produced at lab scale extruder with processing conditions: BUR = 2.5:1, FLH = 3 DD, Die gap = 1.8mm

Property		Typical Value*	Unit	Test Method
Tensile Strength at Break	MD/TD	52/50	MPa	ISO 527-3
Elongation at Break	MD/TD	650/700	%	ISO 527-3
Tensile Strength at Yield	TD	11	MPa	ISO 527-3
Tensile Modulus	MD/TD	210/220	MPa	ISO 527-3
Tensile Modulus (1 % Secant)	MD/TD	190/200	MPa	ASTM D 882
Elmendorf tear strength	MD/TD	550/700	g	ASTM D 1922
Dart Drop		>1000	g	ASTM D 1709/A
Coefficient of Friction (Dynamic)		≤0.20		ASTM D 1894
Haze**		8%		ASTM 1003
Gloss (45°)**		60		ASTM D 2457

* Typical properties and data should not be used for specification work

** blend with 10 % LDPE

PROCESSING GUIDELINES

Anteo™ FK1828 can be processed in most types of blown film equipment such as LDPE, LLDPE or HDPE extruders.

Anteo™ FK1828 is well suited for co-extrusion™ combination with Borstar® PE / BorShape™ PE / LDPE / PP products.

Recommended extrusion temperature is 180 - 210°C. Die gap of 1.4 - 2.2 mm will give the best balance between extruder pressure and physical properties in the film. **Anteo™ FK1828** enables energy saving by processing at lower temperature and motor load with excellent bubble stability. To boost optical properties of film made with **Anteo™ FK1828**, it is recommended to blend with minimum 5% LDPE.

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FOOD CONTACT REGULATIONS

Anteo™ FK1828 fulfils the food contact regulations in most countries. If required, contact your Borouge / Borealis representative for a certificate.

STORAGE

The product should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

More information on storage can be found in Safety Information Sheet for this product.

SAFETY

The product is not classified as a hazardous mixture.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

A Safety Information Sheet is available on request. Please contact your Borouge representative for more details on various aspects of safety, recovery and disposal of the product.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

RELATED DOCUMENTS

If more information is required, please visit www.borouge.com or contact a Borouge / Borealis representative for information.

DISCLAIMER

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borouge makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

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