versalis

Technical data sheet

GREENFLEX ®

FL 65

EVA

Ethylene vinyl acetate copolymer

Greenflex FL 65 is an ethylene vinyl acetate copolymer (EVA) for extrusion/co-extrusion blown and cast film. Films produced with Greenflex FL 65 show a low fish eyes content, very high elasticity, good optical properties and good sealability at low temperatures.

Main Application

Greenflex FL 65 is recommended for the production of co-extrusion film, lamination film, stretch film, barrier film for food packaging and for all those applications where the typical purity of film grades is required.
In coextruded structures it can be used as a compatibilizer with polymers of different nature.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2,16 kg)	2,5	g/10min	ISO 1133
Vinyl acetate content	28	%	Internal method
Density	0,952	g/cm3	ISO 1183
Melting Point	74	°C	Internal method
Brittleness temperature	< -80	°C	ASTM D 746
Vicat softening point (1 kg)	44	°C	ISO 306/A

Film Properties *	Value	Unit	Test Method
Tensile stress at yield MD	4	MPa	ISO 527-3
Tensile stress at yield TD	3,5	MPa	ISO 527-3
Tensile stress at break MD	31	MPa	ISO 527-3
Tensile stress at break TD	28	MPa	ISO 527-3
Elongation at break MD	600	%	ISO 527-3
Elongation at break TD	800	%	ISO 527-3
1% Secant modulus MD	45	MPa	ISO 527-3
1% Secant modulus TD	55	MPa	ISO 527-3
Elmendorf tear resistance MD	20	N/mm	ISO 6383-2
Elmendorf tear resistance TD	50	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	500	g	ISO 7765-1/A
Dynamic coefficient of friction (COF)	> 0,5	-	ISO 8295
Haze	1	%	ISO 14782
Gloss, 45°	90	%	ASTM D 2457
Recommended film thickness	25 ÷ 80	micron	-

Mechanical Properties * *	Value	Unit	Test Method
Shore A	75	Shore A	ISO 868 A
Shore D	32	Shore D	ISO 868 A

(*) Film properties are typical of a blown film extruded at 160 °C. Actual properties may vary depending upon operating conditions and additive package.
(**) Values are referred to injection moulded specimens. Actual properties are typical and may vary depending upon operating conditions.

Greenflex ® is a registered trademark of Versalis

Processing notes

Greenflex FL 65 can be processed by conventional blown film extrusion equipments. Operation temperature from 150 °C to 170 °C is recommended. Depending on extrusion conditions, the suggested film thickness is from 25 to 80 µm.

Storage and Handling

Greenflex FL 65 is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletised polyethylene resin, provided the equipment is designed to prevent accumulation of the fines and dust particles that are contained in all polyethylene resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used be equipped with filters of adequate size, operated and maintained in such a manner to ensure that no leaks develop and earthed adequately. We further recommend that good housekeeping should be practised throughout your facility.
The product should be stored in dry conditions at temperatures below 50 °C and protected from sunlight. Improper storage can initiate degradation which results in odour generation, colour changes and can have negative effects on the physical properties of the product.
Before using this product it is recommended to read and understand the relevant Safety Data Sheet.

Availability

Contact the Versalis sales office nearest to you regarding availability and your specific application requirements.

Food Contact Status

Greenflex FL 65 complies with the rules and regulations of the European Union, as well as other countries, regarding the use of plastic materials in food contact applications. Certificates of compliance are available upon request.

RAJSHILA®

IMPORTANT: please consult the relevant safety data sheet for more detailed information. The information and data presented herein are to the best of our knowledge true and accurate but no warranty or guarantee, expressed or implied, is made nor is any liability accepted with respect to the use of such information and data. Versalis is available to provide the guaranteed values for each product on demand.
DISCLAIMER: it is the sole responsibility of the end-user to determine the safety, the regulatory compliance as well as the technical suitability of the product for the intended application. The product is not intended for use in medical devices and pharmaceutical applications; Versalis declines all responsibility and cannot be held liable in case of use in the above mentioned applications.