

Provisional Technical Data Sheet

VERSALIS REVIVE® (PE) 100 LF S

LLDPE/LDPE

VERSALIS REVIVE® PE 100 LF S is a LLDPE/LDPE polyethylene for blown-film and extrusion containing 100% of post-consumer plastic from municipal waste separate collection selected for neutral color, allowing its use in high content technological applications.

Certificate n. 1915/2020

Main Applications

VERSALIS REVIVE® PE 100 LF S is suitable for the production of films for secondary or tertiary industrial packaging, where neutral color is particularly required (eg shrink film, hoods, industrial bags...). It is preferably to be used in coextrusion, in one or more internal layers and in a mixture with virgin polyethylene. The percentages of use (up to 100%) and the thicknesses must be evaluated according to the final characteristics of the application.

VERSALIS REVIVE® PE 100 LF S is not suitable for the production of articles and materials intended for direct contact with food, the manufacture of toys or items for early childhood and in pharmaceutical, cosmetic and / or medical applications.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	0.90	g/10min	ISO 1133
Density	0.925	g/cm ³	ISO 1183
Moisture content	≤0.5	%	Internal method
LDPE content	65+75**	%	DSC method
LLDPE content	25+35**	%	DSC method
PP content	≤ 5 **	%	DSC method
Color	Amber	-	Visual method

Film Properties *	Value	Unit	Test Method
Tensile stress at yield MD	9	MPa	ISO 527-3
Tensile stress at yield TD	9	MPa	ISO 527-3
Tensile stress at break MD	22	MPa	ISO 527-3
Tensile stress at break TD	20	MPa	ISO 527-3
Elongation at break MD	400	%	ISO 527-3
Elongation at break TD	450	%	ISO 527-3
1% Secant modulus MD	220	MPa	ISO 527-3
1% Secant modulus TD	210	MPa	ISO 527-3
Elmendorf tear resistance MD	30	N/mm	ISO 6383-2
Elmendorf tear resistance TD	130	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	140	g	ISO 7765-1/A
Dynamic coefficient of friction (COF)	>0.5	-	ISO 8295
Haze	20	%	ISO 14782
Gloss, 45°	45	%	ASTM D 2457
Recommended film thickness	40 + 120	micron	-

(*) Typical properties of an extruded film 180 °C-210 °C, BUR 3 and thickness 70 µm. The properties of the film are to be understood as typical and may vary according to the transformation conditions and the additive package.

(**) Typical values.

Processing notes

VERSALIS REVIVE® PE 100 LF S can be transformed on conventional blown film and extrusion systems. The suggested melt temperature range is from 180 ° C to 210 ° C. The recommended thicknesses are from 40 to 120 microns. If necessary, it is suggested to carry out a possible stove treatment of the granule or use suitable drying additives during the transformation.

Storage and Handling

VERSALIS REVIVE® PE 100 LF S is supplied in pellet form and may be conveyed and bulk fed through equipment designed for conventional pelletized polyethylene resin. As with all polymeric materials, it is necessary 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 practiced 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 odor generation, color 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.

Conformity declaration

The conformity declarations and the certifications are available upon request.

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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.