

Technical data Sheet

VERSALIS REVIVE® (PE) 100 HD - Series Forever

HDPE

VERSALIS REVIVE® PE 100 HD - Series Forever is a HDPE-based polyethylene for blow moulding, containing 100% post-consumer plastic from municipal waste separate collection, allowing its use in high-tech applications.



Certificate n. 1915/2020

Main Applications

VERSALIS REVIVE® PE 100 HD - Series Forever is indicated for the production of industrial containers of various types, pipes and various profiles. Use in coextrusion is recommended, in one or more internal layers and in a mixture with virgin polyethylene.

VERSALIS REVIVE® PE 100 HD - Series Forever is not suitable for the production of articles and materials intended for direct food contact, the manufacture of toys or items for early childhood and for pharmaceutical, cosmetic and medical applications.

Proprietà Principali

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	0.3	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	1.2	g/10min	ISO 1133
Melt Flow Rate (190 °C/21.6 kg)	30	g/10min	ISO 1133
Density	0.954	g/cm ³	ISO 1183
Melting point	135	°C	Internal method
Brittleness temperature	<-60	°C	ASTM D 746
Vicat softening point (1 kg)	125	°C	ISO 306/A
Color	Light grey	-	Visual method
Mechanical Properties *	Value	Unit	Test Method
Tensile stress at yield	30	MPa	ISO 527-3
Tensile stress at break	30	MPa	ISO 527-3
Tensile strain at yield	-	%	ISO 527-3
Elongation at break	>600	%	ISO 527-3
Flexural modulus	1200	MPa	ISO 178
Hardness Shore D	64	-	ISO 868 A
Falling Weight:	-	J	ISO 6603-2
Izod impact strength, notched	180	J/m	ISO 180/A
Environmental Stress Cracking Resistance (ESCR)**	50	h	ASTM D 1693 (B)



Processing notes

VERSALIS REVIVE® PE 100 HD - Series Forever can be transformed on the latest blow molding machines at the highest speeds with excellent results. Blown parts show good surface quality. Breakdown is excellent. 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 HD - Series Forever 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

For information about availability, please refer to your Versalis representative.

Conformity declaration status

The conformity declarations and the certifications are available upon request.

