

Technical Data Sheet

VERSALIS REVIVE® (PE) COM75HM1

HDPE based compound

VERSALIS REVIVE® PE COM75HM1 is a HDPE based polyolefin compound for blown moulding, containing 75% of post-consumer plastic from municipal waste separate collection, stabilizers and compatibilizers agents, allowing its use in high content technological applications.



Main Applications

VERSALIS REVIVE® PE COM75HM1 is indicated for the production of industrial containers of various types, pipes and various profiles. It is preferably to be used in coextrusion, in one or more internal layers and in a mixture with virgin polyethylene. Its high molecular weight and high modulus guarantee a good compromise between resistance to stress cracking and high vertical load in the stacking of the products.

VERSALIS REVIVE® PE COM75HM1 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/216 kg)	0.20	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	0.9	g/10min	ISO 1133
Melt Flow Rate (190 °C/21.6 kg)	20	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

Mechanical Properties *	Value	Unit	Test Method
Tensile stress at yield	27	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)	> 60 ***	h	ASTM D 1693(B)

(*) Values refer to compression molded specimens. The properties are typical and may vary depending on the molding conditions.

(**) Base resin density.

(***) 100% surfactant - Condition B.

Processing notes

VERSALIS REVIVE® PE COM75HM1 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 COM75HM1 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 status

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.