

Description

The EBM_EA18 compound is recommended for extrusion blow molding (EBM) technology for the production of bottles and tanks with not thin thicknesses.

Main features

The compound has a melt fluidity at 175 ° C suitable for EBM technology, while the thicknesses depend on the different draw ratios used and on the diameter of the preform.

The mechanical tensile properties show that the material is ductile and has high values of deformation at break, therefore low stretching ratios are recommended.

Processing conditions

The recommended melt temperature on the extrusion head is 170 ° / 175 ° C, while a temperature of 160 ° C is recommended at the start of the screw.

Transport and Storage

The material is supplied in granules in 25 kg bags or 1000 kg big bags.

The bags must be stored in a dry place, away from light at a temperature between 10-40 ° C and kept in the original packaging.

Safety, protection and recommendations during use

During processing, avoid closed environments and respect the recommendations given in the safety data sheet. The material has a slight odor due to the emission of gases that are formed during extrusion. A hot treatment (60/70 ° C) in a stream of hot air for 2/3 hours is recommended to eliminate odors.

Plastic material deriving entirely from recycled PE

The material complies with the UNI 10667-2 (rPE) standard for Polyethylene intended for different uses, coming from industrial residues and / or from pre- or post-consumer materials. The suggested processing technologies are:

profile 1: blow molded extrusion (EBM)

profile 4: bubble blowing. (BM)

The information contained in this technical data sheet is believed to be accurate, but all recommendations are made without any guarantee, since the conditions of use are not under the control of the company APM Srl, which declines any responsibility in relation to the use of the information and the use of this mixture in combination with other materials or in other processes.

Properties

The values in the table were obtained from an average of analyzes and tests carried out during the production of granules with 100% rPE deriving from post-consumer and industrial waste.

The material complies with the UNI 10667_2-profiles 1 and 4 standard.

Properties	Spec	UoM	Value
MFI 160°C - 2.16kg	ISO 1133	gr/10 min	0,25
MFI 170°C - 2.16kg	ISO 1133	gr/10 min	0,32**
MFI 190°C - 2.16kg	ISO 1133	gr/10 min	0,55
Density	ISO 1183	g/cm ³	0,936***
Hardness Shore D	ISO 868	Shore D	40
Module traction	ISO 527-2	MPa	196,2
Effort to yield	ISO 527-2	MPa	10,6
Effort at break	ISO 527-2	MPa	11.9
Deformation at break	ISO 527-2	%	675,0
Resistance to tearing	ISO 34	N/m	36,5
HDT temperature	ISO 75	°C	-
Content ashes	ISO 11358	%	5-7*

* The PE content is > 80% by weight, while the ashes are due to the presence of aluminic present in post-consumer PE derived from Ecoallene. The visible contamination on the surface of the containers is high. Contaminations are due to aluminum.

** recommended for containers with volume less than 5 dm³

*** class 3 of density according to UNI 10667-2