

rHDPE 110-001 Green



ORIGIN OF END-OF-USE POLYMERS

SELECTED PROCESSING SUITABILITY

OceanIX is our range of high-quality post-consumer recycled, PCR) raw materials originating from end-of-life maritime gear that would otherwise end up in our oceans or on landfill, sourced for preventive action to eradicate plastic pollution, and suitable to be used at 100% or in a blend.

RECYCLING STEPS

Rough Sorting; Fine Fractioning/Homogenisation; Metal Detection; Shredding; Washing; Separation; Compounding; Extrusion

Extrusion (e.g.: sheets; fibres; films; pipes; tubes); Thermoforming; Blow Moulding (e.g.: bottles); Most suitable:

Roto Moulding

Possible: Injection Moulding; 3D Free Form Injection Moulding; 3D Print

COMPLIANCE1 REACH; RoHS; Recycling Norms (European Norm: EN15344:2007 and Spanish Norm: PNE53978)

TECHNICAL DATA				
	METHOD / INFO	CONDITIONS	VALUE	UNITS/COMMENTS
PHYSICAL PROPERTIES				
Melt Flow Index, MFI	ISO 1133-1	190°C, 2,16 kg	0,6 to 0,9	g/10 mins
Density	ISO 1183-1-Method A	Immersion	0,94 to 0,96	g/cm3
Shape		Visual inspection	Regular shaped granules	
Color		Visual inspection	Green	
Color variation	CieLAB		<4,0	Delta E
Smell			No	
Recycled Content			98	%
Filtration Level		Mesh Size	300	μ
Contamination	No of defects on extruded film		n/a	defects/dm2
Other Polymers	DSC and FT-IR Analysis		0	%
MECHANICAL PROPERTIES (AT 23°C)				
Tensile strength ²	ISO 527-1/2		20 to 25	N/mm2 (MPa)
E-modulus²	ISO 527-1/2		> 600	%
Flexural Modulus	ISO 178		n/a	%
Charpy Impact Strength	ISO 179-1/1eU ^b	Unnotched	110 to 130	kJ/m2
THERMAL PROPERTIES				
Melting Point	ISO 11357-1/3		132 to 140	₀ C
ASH CONTENT	ISO 3451-1		< 1,5	%

¹Testing Frequency: 1 composite sample per 12 hour shift. A composite sample is comprised of an increment from each Bigbag that is produced during the shift ² Performed on injection moulded samples type 18.

Material handling: rHDPE granules need normally not to be dried. However, condensation of atmospheric moisture inside the packing may occur due to fluctuating temperatures and high humidity upon storage. Plastix recommends that the material is predried to remove possible condense moisture, which could be done normally with 2 hours drying at 80°C or according to our customers' normal pre-drying procedure for HDPE.

FOR FURTHER TECHNICAL INFORMATION PLEASE CONTACT

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By using OceanIX rHDPE and with reference to Plastix' Life Cycle Assessment (LCA) you are saving our planet for $1650~\rm kg$ equivalent emissions in comparison with similar virgin plastic material, every time you use $1000~\rm kg$ OceanIX rHDPE, improving $\rm CO_2$ emission savings by a factor 1:5,5. Depending on your application, the percentage of OceanIX rHDPE used and the end of life option for your own product, you could even further

increase the CO₂ and resource savings.

By using OceanIX rHDPE as your prevailing Green Plastics raw material choice you directly contribute to further closing the material loops, reducing landfilling, marine pollution and loss of valuable resources.



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