PROVISIONAL TECHNICAL DATA SHEET

RENEWI rPE COLOR

CIRCULAR POLYETHYLENE FROM CONTAINER PARCS AND COMMERCIAL WASTE

RENEWI collects, sorts and regrinds post-consumer and post-industrial mixed rigid plastic waste streams from Households, Retail, DIY, Restaurants and other commercial or governmental businesses.

By purifying and sorting mixed plastics into high-quality polyolefin regrinds, RENEWI is producing a stable base grade for the conversion and compounding industries to create high-end circular plastic products, reducing the use of fossil virgin plastics and saving up to 75% CO_2 emissions[1].

Product Characteristics

"RENEWI rPE Color" is a > 90% Post Consumer Waste based grade in regrind form with a low residual odor and good impact resistance. The material has a very limited number of black particles. A purity level of > 95% makes this grade a suitable basis for high-end applications that require stable processability and performance.

Recommended Applications

"RENEWI rPE Color" is a general-purpose grade that can be used for injection moulding and roto moulding applications such as crates, boxes, and as a post-consumer basis for compounds to produce higher-end applications for the non-food packaging, automotive, building & construction and E&E markets.

This product is not tested and therefore not validated for use in food, pharmaceutical, medical, or potable water applications.

Physical

Description	Unity	Typical value	Standard
Meltflow Index (190°C/2.16 kg)	g/10 min	3	ISO 1133-1
Density	kg/m^3	960	ISO 1183-1
Ash content	%	< 2.0	ISO 3451-1/A/600°C
Volatiles	%	< 0.5	ASTM D6980 @ 120°C
PE Content	%	> 95	Sesotech
Black particles	%	< 2	Sesotech

Mechanical[2]

Description	Unity	Typical value	Standard
Tensile Modulus	MPa	700	ISO 527-2
Strain at Yield	%	11	ISO 527-2
Strain at Break	%	660	ISO 527-2
Charpy Notched Impact	kJ/m^2	10	ISO 179-1

[2]Properties were determined on injection moulded specimens prepared in accordance with ISO 1873-2

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[1]Source: Increased EU Plastics Recycling Targets: Environmental, Economic and Social Impact Assessment Final Report prepared for Plastic Recyclers Europe by Deloitte, May 29th 2015

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waste no more