

LUVOTECH[®] eco
PC/ABS T85 BK

Different
recyclate contents

Sustainability
vs.
Performance

Recyclates with virgin material content

Sustainability vs. performance

The demand for the use of sustainable materials (recyclates) is increasing. Industry experts assume that the carbon footprint of a plastic granulate will soon become just as important a selection criterion as technical characteristics such as strength and toughness.

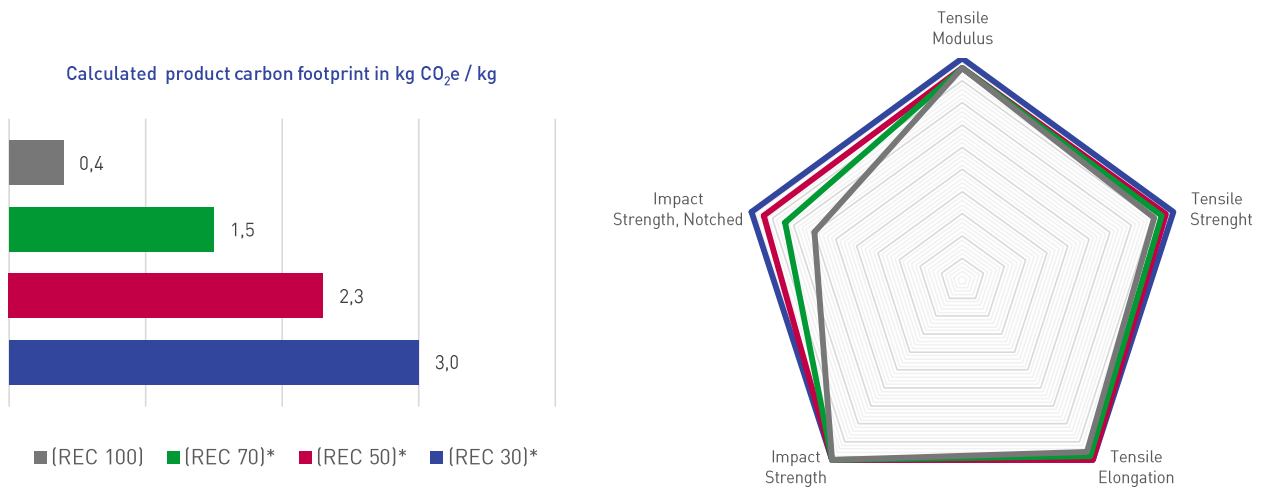
But how does the daily handling of the use of recyclates look like...?

- Are there enough raw materials available to cover the demand according to the requirements?
- Is the technical performance sufficient and is the greater tolerance acceptable for the processing industry?

The answer could be in the mixing ratio recyclates / virgin raw materials. Therefore, LEHVOSS considered different mixing ratios with 30% (REC 30), 50% (REC 50), 70% (REC 70) and 100% (REC 100) recycled content. Results see next page.

LUVOTECH[®] eco PC/ABS T85 BK

Carbon footprint vs. technical performance



The Carbon footprint of the 100% the recyclates was calculated using established, science-based methods and the Life Cycle Assessment (LCA) software GaBi. The calculation was conducted based on the international LCA standards DIN EN ISO 14040, DIN EN ISO 14044 and the standard DIN EN ISO 14067 "Carbon footprint of products". The calculation of the mixtures are based on these results.

Technical data

Basic- and development types (*) with recycled content

Properties	Unit	(REC 30)*	(REC 50)*	(REC 70)*	(REC 100)
Tensile Modulus	MPa	2.300	2.200	2.200	2.200
Tensile Strength	MPa	55	53	52	50
Tensile Elongation	%	4,7	4,7	4,6	4,5
Impact Strength	kJ/m ²	100	100	100	100
Impact Strength, Notched	kJ/m ²	50	47	42	35

The technical data of the development types (*) was determined on a non-representative number of samples.

The test speeds used correspond to research and non-common series standards. The values listed are therefore only to be regarded as guide values.

Disclaimer:

Any recommendations made for use of Seller's materials are made to the best of Seller's knowledge and are based upon prior tests and experience of the Seller believed to be reliable; however, Seller does not guarantee the results to be obtained and all such recommendations are non-binding – also with regard to the protection of third party's rights –, do not constitute any representation and do not affect in any way Buyer's obligation to examine and/or test the Seller's our goods with regard to their suitability for his Buyer's purposes. No information given by the Seller in this document is to be construed in any way as a guarantee regarding characteristics or duration of use, unless such information has been explicitly given as a guarantee.

Europe & Head Office

Lehmann&Voss&Co. KG
Alsterufer 19
20354 Hamburg | Germany
Phone: +49 40 44 197 250
Email: info@lehvoss.de

www.luvocom.com

North America

LEHVOSS North America, LCC
185 South Broad Street
Pawcatuck, CT 06379 | USA
Phone: +1 855 681 3226
Email: info@lehvoss.de

Follow us on:



Asia

LEHVOSS (Shanghai) Chemical Co., Ltd
Unit 4805 Maxdo Centre
8 Xingyi Road, Changning District
Shanghai 200336 | China
Phone: +86 21 6278 5186
Email: info@lehvoss.cn



LEHVOSS
Group

10/2022