



BSI Standards Publication

Plastics recycling — Classification of plastic recyclates as post-consumer recyclates (PCR) and post-industrial recyclates (PIR)

National foreword

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English Version

Plastics recycling - Classification of plastic recyclates as post-consumer recyclates (PCR) and post-industrial recyclates (PIR)

Recyclage des plastiques - Classification des recyclats de plastiques comme recyclats post-consommation (PCR) et recyclats post-industriels (PIR)

Recycling von Kunststoffen - Klassifizierung von Kunststoffrezyklaten als Post-Consumer-Rezyklate (PCR) und Post-Industrial-Rezyklate (PIR)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

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Introduction

In order to promote the uptake of plastic recycled material, the European Commission has already set minimum recycled plastic content targets for example for beverage bottles made from plastics, especially PET bottles. Similarly, recycled content targets are planned for further key products such as packaging, vehicles and construction materials. [1-3]

Plastic recyclates are plastics materials resulting from the recycling of plastic waste. Both legal and normative definitions of the term 'waste' leave room for interpretation. Taking into account the specifics of individual industries and applications, as well as differences in regional waste management systems and national legislations, this interpretation room has a major impact on the effective and transparent implementation of the circular economy model. In this context, a more precise and generally applicable classification of pre-consumer/post-industrial and post-consumer plastic waste as an input for the manufacture of pre-consumer/post-industrial recyclates (PIR) and post-consumer recyclates (PCR) is required. This classification is important in order to reflect the recycling effort required for the production of PIR and PCR and to concretise the material flow in the recycling of processing waste.

The main aim of this document is to harmonise and concretise the currently existing legal and normative definitions for PIR and PCR as far as possible. This document is intended to help to ensure that all stakeholders in various industries have the same understanding of the PIR and PCR and use definitions which are as universal as possible. The followed definitional approach is applicable to various plastic industries and applications that are currently at different stages of implementing a circular economy model. To enable this, the scope of the document has been narrowed to a very specific topic dealing with the definitions of PIR and PCR. All further related topics dealing with, for example, definitions like 'waste', 'product', 'by-product', etc. refer to the relevant legal documents and/or standards, which are currently being revised and adapted in the context of the circular economy model.

Furthermore, this document mentions some discussion points regarding PIR and PCR definitions where there is currently no consensus across various industries and applications. The reason for this is that due to the wide variety of plastic products and the corresponding waste streams, some of the plastic waste streams can have certain material, logistical or other advantages or disadvantages with regard to recycling. Thus, in certain cases, a universal definition can disadvantage or favour a particular industry or a plastic waste stream.