



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39690.1-2020

**Plastics - Mixtures of polypropylene (PP) and polyethylene (PE)
recyclate derived from PP and PE used for flexible and rigid consumer
packaging - Part 1: Designation system and basis for specification**

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Table of Contents

Foreword...	3
1 Scope...	5
2 Normative references...	6
3 Designation system...	6
4 Examples of designations...	9

Foreword

GB/T 39690 "Plastics - Mixtures of polypropylene (PP) and polyethylene (PE) recycle derived from PP and PE used for flexible and rigid consumer packaging" is divided into two parts:

- Part 1: Designation system and basis for specification;
- Part 2: Preparation of test specimens and determination of properties.

This Part is Part 1 of GB/T 39690.

This Part is drafted in accordance with the rules given in GB/T 1.1-2009.

This Part, using translation method, is identical to ISO 18263-1:2015 "Plastics

- Mixtures of polypropylene (PP) and polyethylene (PE) recycle derived from PP and PE used for flexible and rigid consumer packaging - Part 1: Designation system and basis for specification".

China's documents which have a consistent correspondence with the international documents normatively referenced in this Part are as follows:

- GB/T 1033 (all parts) Plastics - Methods for determining the density of non-cellular plastics [ISO 1183 (all parts)]
- GB/T 3682.1-2018 Plastics - Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics - Part 1: Standard method (ISO 1133-1:2011, MOD)
- GB/T 39690.2-2020 Plastics - Mixtures of polypropylene (PP) and polyethylene (PE) recycle derived from PP and PE used for flexible and

rigid consumer packaging - Part 2: Preparation of test specimens and determination of properties (ISO 18263-2:2015, IDT)

This Part was proposed by China Petroleum and Chemical Industry Federation.

This Part shall be under the jurisdiction of National Technical Committee 15 on Plastic of Standardization Administration of China (SAC/TC 15).

Drafting organizations of this Part: China Bluestar Chengrand Chengdu Testing Technology Co., Ltd., Qingdao Product Quality Supervision and Testing Research Institute, Anhui Glant Advanced Material Co., Ltd., Guangzhou Quality Supervision and Testing Institute, Beijing Center for Physical & Chemical Analysis, Dongguan Zhongnan Environmental Protection Technology Co., Ltd., Lianxingzou New Material Technology (Guangzhou) Co., Ltd.

Plastics - Mixtures of polypropylene (PP) and polyethylene (PE) recyclate derived from PP and PE used for flexible and rigid consumer packaging -

Part 1: Designation system and basis for specification

1 Scope

This Part of GB/T 39690 establishes the designation system and basis for specification for mixtures of polypropylene (PP) and polyethylene (PE) recyclate.

It covers mixtures of polypropylene (PP) and polyethylene (PE) recyclate derived from PP and PE used for flexible and rigid consumer packaging for moulding and extrusion. Recyclate from packaging used for the transport, handling, or storage of hazardous goods shall not be used.

It does not apply to mixtures of recyclates and virgin resin.

It does not apply to the mixtures containing special type of PE or PP, for example, PE-UHMW, TPO, etc.

The types of mixtures of PP and PE recyclate are differentiated from each other by a classification system based on appropriate levels of the designatory

properties.

- a) Composition
- b) Melt mass-flow rate
- c) Density
- d) Colour

It is not intended to imply that materials having the same designation give necessarily the same performance. This Part of GB/T 39690 does not provide engineering data, performance data, or data on processing conditions which may be required to specify a material for a particular application and/or method of processing. If additional properties are required, they shall be determined in accordance with the provisions of ISO 18263-2, if applicable.

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