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

GB/T 40006.8-2021

Plastics - Recycled plastics - Part 8: Polyamide (PA) materials

塑料 再生塑料 第8部分：聚酰胺(PA)材料

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 8 of GB/T 40006 "Plastic Recycled Plastics". GB/T 40006 has released the following parts.

- 1. General rules;
- 2. Polyethylene (PE) material;
- 3. Polypropylene (PP) material;
- 5. Acrylonitrile-butadiene-styrene (ABS) materials;
- 6. Polystyrene (PS) material;
- 7. Polycarbonate (PC) material;
- 8. Polyamide (PA) materials;
- 9. Polyethylene terephthalate (PET) materials; Please note that some of the contents of this document may involve patents. The issuing agency of this document is not responsible for identifying patents. This document was proposed by the China Petroleum and Chemical Industry Federation. This document is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15). Drafting organizations of this document. Kingfa Technology Co., Ltd., Shanghai Plite Composite Materials Co., Ltd., Shandong Baotai Thermal Insulation Materials Co., Ltd., Jinyang (Xiamen) New Material Technology Co., Ltd., Ningbo Jianfeng New Material Co., Ltd., Hangzhou Jinzhou Polymer Technology Co., Ltd., South China University of Technology, Zhonglan Chenguang Chengdu Inspection Technology Co., Ltd., Weikai Inspection Technology Co., Ltd., Qingdao Dagang Sea, the People's Republic of China Customs, China Petroleum and Chemical Industry Federation, Chinese Academy of Environmental Sciences, Chongqing Gengye New Material Technology Co., Ltd. The main drafters of this document. Li Jianjun, Zhang Haisheng, Jiang

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The plastics industry is an important pillar industry of the national economy. With the rapid development of my country's plastics industry and the large-scale use of plastic products, plastics Recycling and recycling is an important issue facing the industry and one of the ways for the sustainable development of plastics. At the same time, it is also a solution to "white pollution", etc. Environmental issues provide an effective way. At present, there is no product standard in the field of plastic recycling in my country, and there is no standard to follow in the industry. Therefore, GB/T 40006 "Plastic Re "Raw Plastics" series of national standards. According to the characteristics of plastic products, this series of standards is intended to be composed of 12 parts, of which the general rules of Part 1 stipulate General requirements for the naming, terminology, odor grade, restricted substance content, radioactivity, etc. of recycled plastics. The rest of the standards except for the general requirements of the Chinese In addition, the technical requirements for recycled plastics of this kind of material are specified according to the types of plastics. This series of standards is to be composed of the following 12 parts under the general title ``Plastic Recycled Plastics".

- 1.General rules;
- 2.Polyethylene (PE) material;
- 3.Polypropylene (PP) material;

1 Scope

Part 8 of China's national standard series for recycled plastics, covering polyamide. It specifies the classification and naming, the requirements, the test methods and the traceability. Nylon is the engineering plastic of under-bonnet automotive parts, electrical connectors, gears, and the fibre of carpets and fishing nets, and it is worth recycling because virgin polyamide is expensive and its production is energy-intensive. It shares polycarbonate's sensitivity to moisture at melt temperature and adds one of its own: most engineering polyamide is glass-filled, and every reprocessing pass breaks the fibres shorter, so the mechanical properties fall with each cycle in a way the polymer alone would not explain. That is why traceability appears in this part where it does not in the others - a recycled polyamide's usable properties depend on how many times it has been through a machine and on what filler it carries, and neither is visible in a bag of granules.

2 Determination of Water Content

GB/T 17037.1-2019 Preparation of injection molded specimens of plastic thermoplastic materials Part

1.General principles and multi-purpose tests Sample and preparation of long strip samples

GB/T 30102 Guidelines for the Recovery and Recycling of Plastic Plastic Waste

GB/T 37426 plastic sample

GB/T 40006.1-2021 Plastic Recycled Plastic Part

GB/T 2035 Plastic Terms and Definitions

GB/T 2547 Plastic sampling method

GB/T 2918 Standard environment for condition adjustment and testing of plastic samples

GB/T 8170 Numerical rounding rules and the expression and determination of limit values

GB/T 9345.1-2008 Determination of Ash in Plastics Part

3 Terms and definitions

The following terms and definitions defined in GB/T 30102 and GB/T 2035 apply to this document.

3.1 Recycled plastic Plastics processed from waste plastics for original or other purposes, but do not include energy recovery.