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**Plastics - Colour masterbatch - Part 1: Designation system and
basis for specifications**

塑料 色母料 第1部分：命名系统和分类基础

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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 for Standardization Documents" drafting. Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed by China Petroleum and Chemical Industry Federation. This document is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15). This document is drafted by: Kingfa Technology Co., Ltd., Beijing University of Chemical Technology, Ningbo Masterbatch Co., Ltd., Qingdao Zhongxin Huami Plastic Co., Ltd., Chongqing Aocai New Materials Co., Ltd., Chongqing University of Technology, South China University of Technology, Jiangsu Pulaihongmei Color Masterbatch Co., Ltd. Co., Ltd., Guangdong Bosi Technology Co., Ltd., Qingdao Dagang Customs of the People's Republic of China, Zhejiang Qiseluse Masterbatch Co., Ltd., Zhejiang Jincai New Material Co., Ltd., Qingdao Runxing Plastic New Material Co., Ltd., Anhui Hesheng New Material Technology Co., Ltd., Jiangsu Pulima Special New Material Co., Ltd., Jiangsu Wannapu New Material Technology Co., Ltd., Dongguan Caijian Plastic Products Co., Ltd., Guangdong Younger New Material Technology Co., Ltd., Wudi County Longda Plastic Masterbatch Co., Ltd. The main drafters of this document. Li Jianjun, Qiao Hui, Ren Weiqing, Gao Jianguo, Li Youbing, Wang Dong, Wei Bin, He Hui, Yao Feng, Liu Peng, Jing Xinke, Wang Zhizhong, Sun Xia, Niu Maoping, Chu Shaolin, Lu Xianli, Li Hanqing, Dong Bin, Li Zhou, Ding Yun, Zhang Liyan, Pang Yuxi. Plastic masterbatch Part

1 Scope

Part 1 of China's national standard for plastic colour masterbatch, giving the designation system and the basis for specifications. A masterbatch is pigment concentrated in a carrier polymer and pelletised, and it is how plastics are coloured: the moulder buys natural resin and adds a few per cent of masterbatch at the machine, rather than buying pre-coloured compound. The advantages are inventory and flexibility - one resin serves every colour, and

the colour is changed by changing a bag. What the arrangement requires is that the masterbatch be characterised well enough for the moulder to predict the result: the pigment loading, the carrier's compatibility with the base resin, the dispersion quality, and the let-down ratio at which the colour is achieved. A designation system is what allows all of that to be stated compactly and understood by a buyer who did not make it, which is the precondition for the material being traded at all.

This document specifies the classification and designation system for color masterbatches for thermoplastics. This document applies to color masterbatches for thermoplastics consisting of colorants, carrier resins, etc.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 1844.1 Plastic symbols and abbreviations Part

3 Terms and Definitions

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

3.1 Heat resistance heat resistance The color masterbatch's ability to resist discoloration when heated under specified test conditions.

3.2 dispersibility The ease of dispersion of color masterbatch under specified test conditions.

4 Classification and naming

4.1 General The nomenclature and classification system for masterbatches is based on the following standard schema. name description group (optional) feature item group National Standard Number Group (optional) single group character group 1 (required) character group 2 (optional) character group 3 (optional) character group 4 (required) character group 5 (optional) The naming of color masterbatch is composed of "description group" and "feature item group". "Feature item group" is composed of "national standard number group" and "single item group" As a result, the "single item group" can be divided into the following 5 character groups.

a) Character group 1.