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

GB 28374-2025

Replacing GB 28374-2012

Fireproof coating for electric cable

电缆防火涂料

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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 for standardization documents" Drafting. This document replaces GB 28374-2012 "Cable Fire Retardant Coatings". Compared with GB 28374-2012, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows:

- a) Added the terms and definitions of smoke density (see 3.2);
- b) Added product categories and models (see Chapter 4);
- c) The general requirements for products have been changed (see Chapter 5, Chapter 4 of the.2012 edition);
- d) The technical requirements for salt water resistance and defect categories for all items (see Chapter 5 of the.2012 edition) were deleted, and the requirements for oil resistance and Freeze-thaw cycle technical requirements (see Chapter 6, Chapter 5 of the.2012 edition), added salt spray corrosion resistance and smoke density technical requirements Seek (see Chapter 6);
- e) Added cable base material sheath thickness requirements, structural diagram and smoke density test piece base material requirements (see 7.1.1);
- f) Added the test methods for smoke density test pieces, bending resistance test pieces and coating thickness test pieces for physical and chemical properties test pieces (see 7.1.5);

- g) The environmental conditions for the salt resistance and freeze-thaw cycle tests (see 6.2 of the 2012 edition) were deleted, and the oil resistance and bending resistance tests were changed. Environmental conditions (see 7.2, 6.2 of the 2012 edition), added environmental conditions for fineness, viscosity and drying time tests (see 7.2);
- h) The fineness test method has been changed (see 7.4, 6.4 of the 2012 edition);
- i) Added the salt spray corrosion resistance test method (see 7.8);

1 Scope

GB 28374-2025 is the Chinese national standard on fireproof coating for electric cable, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 30 May 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 June 2026. Classification: ICS 13.220.50, CCS C84. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document gives product classification and model, specifies general requirements, technical requirements, inspection rules, as well as marking, packaging, transportation and storage. The corresponding test methods are described. This document is applicable to various types of cable fire retardant coatings in different application scenarios.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 1723 Determination of coating viscosity

GB/T 1724-2019 Determination of fineness of grinding of paints, varnishes and printing inks

GB/T 1728-2020 Determination of drying time of paint film and putty film

GB/T 9969 General principles for instructions for use of industrial products

GB/T 17651.2 Determination of smoke density of electric or optical cables burning under specific conditions Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Coated on the surface of cables with rubber, polyethylene, polyvinyl chloride, cross-linked polyethylene and other materials as conductor insulation and sheath, it has fire resistance Fire retardant coating with flame retardant protection effect.

3.2 Smoke density smokedensity Under the specified test conditions, the minimum light transmittance of the cable fire retardant coating that produces smoke is measured by a light measuring device.

4 Classification and model

4.1 Classification Cable fire retardant coatings are divided into the following categories according to the dispersion medium.

- a) Water-based cable fire retardant coating, which uses water as the dispersion medium;
- b) Solvent-based cable fire retardant coatings, which use organic solvents as dispersion media;
- c) Other types of cable fire retardant coatings, except water-based and solvent-based cable fire retardant coatings.