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

GB/T 46696-2025

Specification for permanent solder mask

永久性阻焊材料规范

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This document is under the jurisdiction of the National Printed Circuit Standardization Technical Committee (SAC/TC47). This document was drafted by: Jiangsu Guangxin Photosensitive New Materials Co., Ltd., Jiangnan University, Hangzhou Lin'an Pengyu Electronics Co., Ltd., and Shennan University. Circuit Co., Ltd., Zhuhai Founder Technology Multilayer Circuit Board Co., Ltd., Shenzhen Xingsen Fast Circuit Technology Co., Ltd., Wuxi Ruilong New Materials Technology Co., Ltd., China Electronics Technology Standardization Institute. The main drafters of this document are. Zhu Min, Liu Ren, Zhu Xiaodong, Dai Jiong, Su Xinhong, Qiao Shuxiao, Li Xiaoming, Xue Chao, An Fenglei, and Cha Xiaoying. Permanent solder resist material specifications

1 Scope

GB/T 46696-2025 is the Chinese national standard covering the green lacquer on a circuit board - its resolution and adhesion, its resistance to the solder bath and to cleaning chemicals, its insulation and its behaviour under damp heat, which is what stops a board failing years later in the field. First edition, under the Ministry of Industry and Information Technology. It was issued on 2 December 2025 and has been in force since 1 July 2026, as a first edition. The document is under the responsibility of the Ministry of Industry and Information Technology. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the classification, performance requirements, quality assurance provisions, packaging, transportation, and other aspects of permanent solder resist materials before and after curing. Storage. This document applies to liquid solder resist and solder resist dry film.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB 190-2009 Packaging Marks for Dangerous Goods

GB/T 2036 Printed Circuit Terminology

GB/T 2423.16-2022 Environmental Testing - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 2036 and SJ/T 10668 apply to this document.

4. Classification This document discusses permanent solder resist materials, categorized into liquid solder resist and dry solder resist film. Liquid solder resist includes. UV-curable type. Solder resist, thermosetting solder resist, liquid photosensitive solder resist.