

IS 17568:2021 Thermal paper – Specification

Thermal paper is a special paper type that is manufactured with specialty coating that aids in inkless printing. On application of heat to the coating, a clear image is formed on the paper with no requirement for ribbons or inks. The coating usually turns black on heating, which, in turn, transfers the image to the paper. Thermal paper is the key component of thermal paper printing, which is considered one of the most economical printing technologies owing to its low energy consumption and low maintenance cost.

Thermal printing is used in many applications such as point of sales solutions for the printing of invoices, ATM and credit card slips and parking tickets, labels as well as print solutions for specialized applications, for example in healthcare (ECG's), ultrasound and prescriptions.

This standard prescribes the requirements, method of sampling and tests for thermal paper. The standard not only specifies various paper properties such as tensile strength, grammage, opacity, brightness etc but also image properties like static thermal color image density at different temperatures, dynamic thermal color image density and background thermal color image density. The requirements for climatic and chemical durability of the thermal paper have also been prescribed. The standard also specifies the packing and marking requirements for the product.