

For Comments Only

Draft Indian Standard

**Graphic technology — Laboratory preparation of test prints —
Part 2: Liquid printing inks
(First Revision)**

ICS 87.080

Not to be reproduced without the permission of BIS or used as Standard	Last Date for receipt of Comments is June 2024
---	---

NATIONAL FOREWORD

(Formal clauses to be added later on)

This standard was first published in 2019. This revision has been undertaken to align it with latest version of ISO 2834-2:2022.

The main changes are as follows:

— parameters describing the preparation of printing forms and anilox cylinders are replaced by data (to be acquired by the user of this document) describing the ink transfer of particular settings of tester, printing forme, ink and substrate.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to an International Standard for which Indian Standard also exists. The corresponding Indian Standard, which is to be substituted in its place, is listed below along with its degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 13655, Graphic technology — Spectral measurement and colorimetric computation for graphic arts images	IS/ISO 13655 : 2017, Graphic technology Spectral measurement and colorimetric computation for graphic arts images	Identical

In this adopted standard, references appear to certain International Standards for which no Indian Standards exist. The technical committee have reviewed the provisions of the following International standards referred in this standard and has decided that they are acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
ISO 187	Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples

Note: The technical content of the document is not available on website. For details, please refer the corresponding ISO/TS 2834-2: 2022 or kindly contact:

Head
Management and Systems Department
Bureau of Indian Standards
Manak Bhawan, 9, B.S. Zafar Marg
New Delhi – 110 002
Email: msd@bis.org.in
Telephone/Fax: 011-23231106

Scope

This document specifies a test method for preparation of test prints produced with liquid printing inks, either water-based, solvent-based or radiation cured printing inks as used in flexography and gravure printing. Such test prints are intended to be used for reflection-based measurements, such as colorimetry and optical density as well as for testing light fastness, and the resistance of printing inks to mechanical and chemical attack regarding either printing ink and/or substrate. This document is not applicable to inks for ink jet printing.

Introduction

This document describes the test print preparation of liquid inks (gravure and flexography). These test prints have a homogeneous distribution of ink on a substrate, a reproducible ink composition and relative ink coverage. Therefore, they are suitable for optical tests so that the measured reflectance can be assigned to a known ink coverage. If tests are done only for mechanical and chemical resistance, the user may apply less accurate methods. The preparation of test prints for paste inks (lithography) is described in ISO 2834-1, while screen inks are covered in ISO 2834-3.

In ISO 2834-1, specific operational settings for the “round-to-round” and the “round-to-flat” offset ink printability testers are provided. Laboratory proofers (printability testers) for liquid inks encompass a much wider array of operating processes and associated settings. Therefore, the guidelines included in ISO 2834-2 are more general and will, of necessity, result in more opportunities for operator error in making the test prints.