

ICS 87.080

CCS A 17



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

GB/T 38153.2-2019

**Graphic technology -- Laboratory preparation of test prints --
Part 2: Liquid printing inks**

Issued on: October 18, 2019

Implemented on: May 1, 2020

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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Foreword

GB/T 38153 "Laboratory preparation of printing technology test prints" is divided into three parts.

---Part 1. Paste ink;

--- Part 2. liquid ink;

--- Part 3. Screen ink.

This part is the second part of GB/T 38153.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to ISO 2834-2.2015 "Printing technology test print laboratory preparation part 2. liquid

Body ink.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

---GB/T 6753.4-1998 Paint and varnish with an outflow cup to determine the outflow time (eqvISO 2431.1993);

---GB/T 10739-2002 Standard atmospheric conditions for the treatment and testing of paper, board and pulp samples (eqvISO 187.1990);

---GB/T 19437-2004 Spectral measurement and chromaticity calculation of printed images of printing technology (ISO 13655.1996, IDT).

This part was proposed by the China Light Industry Federation.

This part is under the jurisdiction of the National Ink Standardization Technical Committee (SAC/TC127).

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1 Scope

This part of GB/T 38153 specifies the production of liquid aqueous or solvent-based ink test prints for flexographic or gravure printing.

Preparation method. These test prints are primarily used for optical testing such as gloss, color, transparency and reflection density. Whether it is printing ink and/or bearing

Prints, which can be used to test light resistance, chemical resistance, physical resistance, and mechanical properties. It also includes radiation solids with higher viscosity.

Flexo printing ink. This section does not apply to inkjet printing inks.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 187 Standard atmosphere for pulp and paper and paperboard temperature and humidity treatment and test and its control procedures and steps for sample temperature and humidity treatment (Pa-

Per, board and pulps-Standard atmosphere for conditioning and testing and procedure for monitoring

The atmosphere and conditioning of samples)

ISO 2431 paint and varnish flow cell for measuring outflow time
(Paints and varnishes-Determination of flow

Time by use of flow cups)

Spectral measurement and chromaticity calculation of printed images of ISO 13655 printing technology (Graphic technology-Spectral measure-

Mend colorimetric computation for graphic arts images)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Anilox roller aniloxroler

Typically mounted on a flexo press, chrome or ceramic rolls with evenly distributed mesh are used to control the amount of ink delivered to the plate.

3.2

Dilutant extender

A transparent material (varnish or polymer solution) used to reduce the ink color concentration and make it suitable for printing.

3.3

Flexographic printing plate printingformeflexography

A cylinder or sleeve covered with embossed rubber or photosensitive resin for transferring ink to the substrate.

3.4

Gravure printing plate printingformeforgravure

A cylinder, sleeve or lithographic plate that has been mechanically engraved, laser engraved or chemically etched to transfer ink onto the substrate.

3.5

Printing ink printingink

The material composition includes colorants, functional components, binders, and auxiliaries.