

ICS 87.080
CCS A 17



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

GB/T 38153.3-2019

**Graphic technology -- Laboratory preparation of test prints --
Part 3: Screen 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 third part of GB/T 38153.

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

This section uses the translation method equivalent to the ISO 2834-3.2008 "Printing Technology Test Preparation for Laboratory Preparation Part 3. Silk

Net ink.

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

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

---GB/T 23649-2009 Printing technology process control optical, geometric and metrology requirements for reflective densitometers

(ISO 14981.2000, 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 preparation method of the test print of the screen printing ink. This test print is mainly used for optics

Testing, such as the colorimetric method, transparency and optical reflection density described in ISO 2846-4, can also be used to test the printing ink and/or substrate light

Ze, light and chemical, physical and mechanical properties.

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,boardandpulp-Standardatmosphereforconditioningandtestingandprocedureformonitoring

Theatmosphereandconditioningofsamples)

ISO 2846-4 printing technology - Colour and transparency of four-color printing inks - Part 4. Screen printing (Graphictechnolo-

gy-Colourandtransparencyofprintinginksetsforfour-colour-printing-Part 4.Screenprinting)

ISO 14981 Print Technology Process Control Optical, Geometric and Surveying Requirements for Printed Reflectance Densitometers (Graphic

technology-Processcontrol-Optical,geometricalandmetrologicalrequirementsforreflectiondensi-

Tometersforgraphicartsuse)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Dilutant extender

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

3.2

Ink flooding

The operation of filling the through holes of the mesh version with ink before printing.

3.3

Ink return device flooding device

A device that fills the through-holes of the cell printing plate with ink prior to printing.

3.4

Ink bed ink rest

The area of the surface of the cell printing plate outside the ink squeegee area.

3.5

Mesh mesh

Uniformly interwoven with wires, with interlaced wire carriers of the same opening size; screen material.