

ICS 37.040.20
CCS G 80



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

GB/T 25250-2010

**Imaging materials -- Colour images on paper prints --
Determination of indoor water resistance of printed colour
images**

成像材料 纸质照片上的彩色影像 打印彩色影像室内耐水性测定

(English Translation)

Issued on: September 26, 2010

Implemented on: August 1, 2011

Issued by: Standardization Administration of China

Table of Contents

Foreword	
Introduction	
1 Scope	
2 Terms and definitions	
3 Water resistance classification	
3.1 Summary	
3.2 Water	
3.3 Medium water	
3.4 Not water	
4 Water resistance measurement process	
4.1 General	

Foreword

This standard is identical with ISO 18935:2005 "color image forming material on the photo paper print color images indoor water resistance Determination "(in English).

This standard is equivalent to translate ISO 18935:2005.

For ease of use, this standard does the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma " , " . " , " ;
- c) Delete ISO 18935:2005 Foreword rewrite of the standard "foreword"; the introduction of international standards as a direct translation of the Standard Introduction;
- d) Remove ISO 18935:2005 Information Appendix A.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the national digital imaging materials and digital printing materials Standardization Technical Committee (SAC/TC432) centralized.

This standard was drafted. China Lucky Film Group Corporation.

Introduction

In the color photo normal storage conditions, water resistance is not an important consideration. But in disaster conditions (such as floods, land Shock, or other water-based destruction), if the photo is salvaged after being repaired, that this feature will be very critical. Used in digital color photo Tablets, and some digital photos colorants used in a variety of materials are water soluble. They have different levels of water resistance depends Colorants and photos whether water protective layer. In addition, the paper is sometimes used is also important, in the same kind of paper colorants may on exhibit good water resistance, but in another paper that can be completely washed away. And even the use of water-insoluble colorant printing system, If you use paper that is not the same water, but also may be destroyed water. This standard provides a standard method to evaluate color photos Qualitative water resistance.

Imaging Materials

Color images on photo paper Printing color images indoor water determination

1 Scope

This standard specifies the color image indoor water resistance test method for measuring print. This standard applies to both digital and analog photos.

2 Terms and definitions

The following terms and definitions apply to this standard.

Environmental conditions ambientconditions Environmental conditions temperature (23 ± 1) °C and relative humidity (50 ± 5)%.

3.1 Summary

Photos water resistance is divided into three categories, that is 3.2 to 3.4 as defined in the water, moderate water, not water.

3.2 Water

Water resistance refers photo photo exposure is not significantly affected by liquid water or moisture in.

Note: no coloring agent (bleeding, blurred, color change), the support (curled, wrinkled, delamination), image surface (gloss change, hydrosphere) significant degradation.

3.3 Medium water

Moderate water resistance refers photos show some changes or damage caused by water, but is still considered suitable for its intended purpose photo.

Note: damage manifested in the slight curl of the media, some delamination at the edges, or because of changes in gloss or a small amount of colorant ringed watermark caused by the movement.

This damage can be quickly removed to relieve water (be careful dry, shake off water, etc.).

3.4 Not water

The aqueous photos intolerance is through contact with water or water mist and other contacts can be easily damaged and are no longer considered suitable for pictures.

NOTE: Such damage manifested in a perceptible curl, image layer was separated, colorant bleeding to no image area or between different color regions penetration, or FIG.

Like degradation (color, gloss variation, surface stains, etc.). Strongly recommends that users of such material to prevent water exposure.

4.1 General

Water resistance refers to the ability to resist water damage photos, this damage will show in many forms, such as mobile colorant; dimensional change and (or) the optical density of the image elements change; degradation of the picture layer, such as wrinkles, curl or lose their luster. At present, many water resistance test methods. E.g, Inkjet printing photos in many cases after water poured into the image of the surface of the water can not dry quickly detect changes occur. The other situation is that Some print photos soaked in water for several hours without any water damage, but if you wipe before drying it will rub off a layer image section.

Extensive tests have shown a complete description of water requires several different test methods. In laboratories carried out by these methods Various attempts to quantify produce comparable test data, but were not successful (perhaps in a given laboratory tests described in this standard is to charge Sub reproducible credible statistical data. However, this is not enough to be the adoption of evaluation criteria determined). For this reason, the regulation Qualitative analysis of a set of test results. This requires that the test results obtained by different printing materials classified as water class (no change) and not water