

Testing Method for Color Fastness of Plastics Under Window Glass Upon Exposure to Daylight

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1. Scope of application

This standard shall specify test method for color fastness of plastics under window glass upon exposure to daylight.

But, this does not apply to the plastics, which consists color fastening agent, which gives out their own light.

Keynote : This test method estimates color fastness by measuring exposed test piece under glass method using color changeable blue scale or gray or color variance machine.

2. Purpose

The purpose of this standard shall be to estimate color fastness of interior materials under window glass upon exposure to daylight.

3. Types of the test

3.1 A type

A test method to measure color fastness by using blue scale.

3.2 B type

A test method to measure color fastness by color changeable gray scale or color variance machine.

3.2.1 B-1 type

A test method of color fastness by exposing certain time and measuring color changes by color changeable gray scale or color variance machine.

3.2.2 B-2 type

A test method of color fastness, which to measure certain time of exposing until it gets to a certain color.

4. Condition of exposing place

Exposing place shall represent the whether conditions of the area, and no artificial or partial conditions, and there should be no ground object which disturbs the ray of the sunlight during 30 minutes after sunrise and 30 minutes before sunset.

- Reference 1.** The place to set up under glass outdoor exposing equipments shall be prevented from dusts.
2. The whether condition shall have changes each year statistically, the sunshine duration per year should be over 2000Hr, all sunshine amount should be more than 4200MJ / m² {100kcal / cm²}.

5. Test equipment and materials

5.1 Blue scale

This blue scale is a plain textile of 1m² per about 200g refine bleached in table 1, and dyed in the regulated density in table 2, and is 8 kinds of blue dyes from 1-class to 8-class.

Table 1.

Species	Yarn		Density {Ply / 5cm}				
	Types	Number		Warp thread		Weft thread	
		Cross	Length	Number of ply	Tolerance	Number of ply	Tolerance
Tropical	Combed yarn	2/48	2/48	114	±2	96	±2

Table 2.

Classes of color fastness (Class)	Name of the dye (¹)
1	C.I. Acid Blue 104
2	C.I. Acid Blue 109
3	C.I. Acid Blue 83
4(¹)	C.I. Acid Blue 121
5	C.I. Acid Blue 47
6	C.I. Acid Blue 23
7	C.I. Solubilized Vat Blue 5.9
8	C.I. Solubilized Vat Blue 8