

Translated English of Chinese Standard: GBT7044-2022

[www.ChineseStandard.net](http://www.ChineseStandard.net) → Buy True-PDF → Auto-delivery.

[Sales@ChineseStandard.net](mailto:Sales@ChineseStandard.net)

**GB**

NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA

ICS 83.040.30

CCS G 49

**GB/T 7044-2022**

Replacing GB/T 7044-2013

---

**Colour carbon black**

色素炭黑

**Issued on: March 9, 2022**

**Implemented on: October 1, 2022**

---

**Issued by: State Administration for Market Regulation;  
Standardization Administration of PRC.**

---

## Table of Contents

Foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions.....	5
4 Classification and naming.....	5
5 Characteristic requirements.....	6
6 Sampling.....	8
7 Test methods.....	9
8 Inspection and judgment rules.....	10
9 Packaging, marking, storage, and transportation.....	11

# Conventional abrasive - Silicon carbide

## 1 Scope

This document specifies the classification and naming, characteristic requirements, sampling, test methods, inspection and judgment rules, packaging, marking, storage, and transportation of colour carbon black.

This document is applicable to colour carbon black used in ink, paint, plastic, leather chemical industry, and other industries.

## 2 Normative references

The following documents contain the provisions which, through normative reference in this document, constitute the essential provisions of this document. For the dated referenced documents, only the versions with the indicated dates are applicable to this document; for the undated referenced documents, only the latest version (including all the amendments) is applicable to this document.

GB/T 3780.2 Carbon black - Part 2: Determination of oil absorption number

GB/T 3780.6 Carbon black - Part 6: Determination of tinting strength

GB/T 3780.7 Carbon black - Part 7: Determination of pH value

GB/T 3780.8 Carbon black - Part 8: Determination of heating loss

GB/T 3780.10 Carbon black - Part 10: Determination of ash

GB/T 3780.12 Carbon black - Part 12: Inspection of impurity material

GB/T 3780.21 Carbon black - Part 21: Determination of sieve residue - Water washing method

GB/T 3780.28 Carbon black - Part 28: Determination the content of polycyclic aromatic hydrocarbons

GB/T 7047 Colour black - Determination of volatile content

GB/T 7048 Colour carbon black - Determination of blackness

GB/T 7052 Colour carbon black - Determination of flow characteristic

GB/T 10722 Carbon black - Determination of total and external surface area - Nitrogen adsorption test method

GB/T 29612 Carbon black - Determination of cadmium, lead, mercury content

### **3 Terms and definitions**

The following terms and definitions apply to this document.

#### **3.1 polycyclic aromatic hydrocarbons; PAHs**

Hydrocarbons that contain two or more benzene rings in the molecule.

**NOTE:** According to the connection method of benzene rings, PAHs can be divided into three types: multi-phenyl alicyclic hydrocarbons, biphenyls, and fused polycyclic arenes.

#### **3.2 heavy metal**

Metals with a density above 4.5 g/cm<sup>3</sup>.

**NOTE:** For example, copper, lead, zinc, tin, nickel, cobalt, antimony, mercury, cadmium, bismuth, etc.

### **4 Classification and naming**

#### **4.1 Classification**

According to the particle size and blackness of colour carbon black, it is divided into the following three categories; see Table 1.

### 6.3 Sampling method

**6.3.1** Method A (arbitration method): Clean the part of the carbon black packaging bag that needs to be cut for sampling, cut a small cross-shaped opening slightly smaller than the outer diameter of the sampling tube, and press the sealing plate; let the oblique end of the sampling tube upwards, insert it to the required place, let the carbon black sample flow out from the nozzle, and collect it with a suitable container; after taking a sufficient amount, seal the sampling port with suitable materials and methods.

**6.3.2** Method B: Disassemble the seam of the carbon black packaging bag, use a sampling spoon to separate the center of the bag opening, take a sample at a depth of about 100 mm, and sew up the bag opening after sampling.

### 6.4 Sample labels

Immediately after the sample is filled into a container, a label is affixed on the outer wall of the container. The label includes the following contents:

- a) Sample name and serial number;
- b) The batch number and quantity of the overall material;
- c) Production unit;
- d) Sample size;
- e) Sampling location;
- f) Sampling date;
- g) Sampling operator.

### 6.5 Sample storage

Sample storage and effective storage period:

- a) Samples shall be kept in a dry and ventilated sample room;
- b) The effective storage period of samples is 6 months.

## 7 Test methods

**7.1** Before the sample is tested, except for the impurity characteristic index test, the samples for all other characteristic tests shall pass through the 850  $\mu\text{m}$  test sieve.

**7.2** The determination of impurity material shall be carried out according to GB/T 3780.12.

- c) When there are major changes in raw materials and processes during production;
- d) During regular production, periodic inspections are carried out to assess the stability of product quality;
- e) When production is resumed after suspension;
- f) When the factory inspection results are significantly different from the previous inspection results;
- g) When a quality dispute occurs;
- h) Other special circumstances, such as contract regulations.

### **8.3 Judgment rules**

**8.3.1** The quality levels of the batches of products are judged according to sample inspection results.

**8.3.2** If any item of impurity material and sieve residue fails to meet the characteristic index requirements, the product is judged as unqualified. If the rest of the items do not meet the characteristic indexes, double-quantity sampling or taking double samples is allowed for re-inspection. After re-inspection with double volume or double samples, if the results meet the requirements of the characteristic indexes, the product is judged as qualified, otherwise, it is judged as unqualified.

## **9 Packaging, marking, storage, and transportation**

### **9.1 Packaging**

**9.1.1** The net weight of each package of the product is  $(10\pm 0.15)$  kg,  $(20\pm 0.2)$  kg, or agreed upon by the supplier and the purchaser.

**9.1.2** Packaging bags and materials: The packaging bags shall have the ability to prevent moisture and pollution. The following packaging materials can be selected, and the supplier and the purchaser shall agree on special circumstances.

- a) Paper bag: 5 layers of kraft paper, the inner bag is 3 layers of  $80\text{ g/m}^2$  kraft paper, and the outer bag is two layers of  $80\text{ g/m}^2$  kraft paper.
- b) Composite bag: the inner bag is 3 layers of  $80\text{ g/m}^2$  kraft paper, and the outer bag is a plastic woven bag.
- c) Other packaging that meets user requirements.

**This is an excerpt of the PDF (Some pages are marked off intentionally)**

**Full-copy PDF can be purchased from 1 of 2 websites:**

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, [Sales@ChineseStandard.net](mailto:Sales@ChineseStandard.net)

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

**----- The End -----**