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Acetylene black

乙炔炭黑

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Standardization Administration of PRC.

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Acetylene black

1 Scope

This standard specifies the classification, requirements, test methods, inspection rules, sampling, acceptance, packaging, marking, storage, transportation of acetylene black.

This standard applies to acetylene black, which is prepared by cracking the acetylene gas, as raw material, at high temperature.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB/T 3780.1 Carbon black - Part 1: Test method for iodine adsorption number

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 3781.5 Acetylene black - Part 5: Determination of grit content

GB/T 3781.6 Acetylene black - Part 6: Determination of apparent specific volume

GB/T 3781.8 Acetylene black - Part 8: Determination of hydrochloric acid absorption number

GB/T 3781.9 Acetylene black - Part 9: Determination of resistivity

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

GB/T 22865 Kraft

5 Test method

5.1 All specimens shall pass through an 850 μm sieve, except for impurity inspection, before the measurement. When determining the resistivity, it shall use the standard sample No.SRAB1 for comparison test at the same time, to check the reliability of the detection system.

5.2 The test items are determined according to the test method in Table 1.

6 Inspection rules

6.1 Type inspection

Type inspection items are all items, which are specified in Chapter 4. Type inspection shall be carried out in one of the following situations:

a) When a new product or an old product after trans-plant production, is subject to trial production and type finalization;

b) When there are major changes in raw materials and processes during production, which may affect product performance;

c) During normal production, periodic inspections are carried out to assess the stability of product quality;

d) When the production is resumed after the suspension of production;

e) When there is a big difference between the exit-factory inspection result and the last inspection result;

f) When the national quality supervision agency puts forward a type inspection request.

6.2 Exit-factory inspection

The exit-factory inspection items are divided into three cases: dry batteries, acetylene black for radio components, 100% compressed products:

a) Test items of acetylene black for dry battery: Apparent specific volume, iodine absorption value, hydrochloric acid absorption, resistivity, heating loss, ash, coarse grain fraction.

b) Test items of acetylene black for radio components: Apparent specific volume, iodine absorption value, hydrochloric acid absorption, resistivity, pH value, heating loss, ash, coarse grain fraction.

In order that the collected samples can represent the quality of the batch of products, all the collected samples shall be mixed thoroughly.

7.6 Sample label

After the sample is placed in the container, it shall affix a label on the outer wall of the container. The label content includes:

a) Sample category and number;

b) Overall material batch number and amount;

c) Manufacturer;

d) Sample amount;

e) Sampling location;

f) Sampling date;

g) The name of the sampler.

7.7 Sample preservation

7.7.1 The samples shall be stored in a sample chamber, which has a suitable temperature and humidity.

7.7.2 The shelf life of samples shall be at least 6 months.

8 Acceptance

8.1 Product acceptance shall be carried out, according to the arrived batch number, based on the exit-factory inspection requirements. If one or more of the product grade specifications are not met, one re-inspection is allowed (except for impurities and coarse grain fraction). After re-inspection, if it still does not meet the index requirements, it shall be downgraded OR judged as a non-conforming product.

8.2 The acceptance period is within 30 days after the product arrives at the consignee's station or port.

9 Packaging, labeling, storage, transportation

9.1 Packaging

9.1.1 At the end of the production process, it is packaged in bags. The packaging bag is a flat rectangular parallelepiped. The net weight of each

the height gauge, to make the number display "0000". At this time, the height reference has been adjusted; the actual height is 10.00 mm now.

A.4.4 Fill a certain amount of dry specimen into the specimen container. Then put the specimen container into the positioning seat. The specimen is filled in a loose state. It shall not apply external force to load it forcedly. When placing the upper test electrode, be careful not to use excessive force as much as possible.

A.4.5 Rotate the pressure handwheel. When the upper test electrode touches the specimen, apply pressure to the specimen in the cylinder, to compress it. The pressure begins to increase gradually, until the pressure is steadily increased to 8.2 MPa.

A.4.6 Observe the height of the specimen: After applying a certain pressure, observe the digital display value of the height. The actual height of the specimen = The digital display value of the height + 10 mm. It is required that the height of the specimen after applying pressure is (16 ± 0.04) mm; otherwise, it shall take sample again.

A.4.7 Measurement of resistivity: Press down the measurement selection switch to the "Resistivity". After the displayed value is stable, directly read the resistivity value.

A.5 Measurement results

Take the arithmetic average of the two measurements as the measurement result. Round it off, according to GB/T 8170.

A.6 Test report

The test report includes the following:

a) The identification and number of the specimen;

b) Number of this standard;

c) The temperature of the test;

d) The humidity of the test;

e) The pressure of the test;

f) The height of the specimen to be tested;

g) Test results (average value);

h) Test date.

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