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MT

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

MT/T 783-1998

**Reinforced filler for rubber and plastic made of ash and slag
from fluidized bed Boiler Specification limits
(English Translation)**

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2 Normative references 1

3 Product code 1

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7 Marking, packaging, transportation, storage 3

Technical requirements for rubber plastic reinforced filler made from ash and slag in boiling furnace

1 Scope

This standard specifies the product code, technical requirements, test methods, Inspection rules and signs, packaging, transportation and storage.

This standard applies to coal or inferior fuel (coal gangue, stone coal, lignite, oil shale, etc.) as the original ash and slag after combustion in a boiling boiler.

Materials, processed rubber and plastic reinforcing fillers.

2 Reference standards the following standards contain provisions that, through reference in this standard, constitute provisions of this standard. When this standard was published, the editions shown were all is effective. All standards will be revised, and all parties using this standard should explore the possibility of using the latest versions of the following standards.

GB/T

528-1992 determination of tensile properties of vulcanized rubber and thermoplastic rubber
 GB/T 2941-1991 Standard Temperature, Humidity and Time for Parking and Testing of Rubber Specimens
 GB/T 3780.1-1991 determination of iodine absorption value of carbon black
 GB/T 3780.3-1994 carbon black dibutyl phthalate absorption value determination (method B)
 GB/T 3780.7-1996 carbon black pH value determination
 GB/T 3780.8-1992 determination of heating loss of carbon black
 GB/T 3780.12-1995 Inspection of carbon black impurities
 GB/T 3780.18-1988 Formula and identification method of carbon black in natural rubber
 GB/T Determination of pour density of granulated carbon black for rubber
 HG/T 2198-1991 General requirements for physical test methods for vulcanizates

3 Product code

4 Technical requirements the FZT series of highly wettable rubber and plastic reinforced fillers shall meet the technical index requirements listed in Table 1.

Table 1 Technical indicators

Project Unit

index

FZT-1 packing FZT-2 packing

1 Appearance black powdery gray powdery

2 Heating loss% ≤ 1.5 ≤ 1.5

3 No impurities

4 Sieve balance% ≤ 1 ≤ 2 5 pH value 7.5 ~ 10.0 7.5 ~ 10.0

6 DBP absorption value 10-5 m³/kg ≤ 60 ≤ 50

7 Iodine value g/kg 10 ~ 30 10 ~ 30

8 Bulk density g/cm³ 0.7 ~ 0.9 0.8 ~ 1.0

10 Elongation at break of vulcanized rubber% ≥ 500 ≥ 580

5 Test method

5.1 Appearance measurement by visual inspection

5.2 Determination of heating loss according to GB/T 3780.8-1992 conducted

5.3 Determination of impurities according to GB/T 3780.12-1995 conducted

5.4 Determination of sieve balance

5.4.1 Instrument.

a) Analytical balance. accuracy of 0.001 g;

- b) Industrial balance with accuracy of 0.1 g;
- c) Standard sieve. hole diameter is 0.0432 mm;
- d) Wool brush. flat and hair length no less than 2 cm;
- e) watch glass. phi80 mm.

5.4.2 Steps.

5.4.2.1 Weigh sample 20 g (weighing to 0.1

g), put into a dry, clean standard sieve.

5.4.2.2 Gently brush with a wool brush. If there are any clumps of particles, use your fingers to lightly loosen them.

But so far.

5.4.2.3 Move the sieve residue that cannot pass through the sieve into a weighed watch glass and weigh it with an analytical balance to the nearest 0.001 g.

5.4.3 Expression of results.

5.4.3.1 The result of sieve residue is expressed as mass percentage and calculated according to the following formula.

$$m_1 - m_2$$

$$m \times 100\%$$

Where.

m_1 --- mass of watch glass and sieve residue, g;

m_2 --- mass of watch glass, g;

m --- the mass of the filler sample, g.

The test results are subject to one measurement.

5.5 Determination of pH value according to GB/T 3780.7-1996 conducted

5.6 Determination of DBP absorption value according to GB/T 3780.3-1994 conducted

5.7 Determination of iodine absorption value according to GB/T 3780.1-1991 conducted

5.8 Determination of bulk density according to GB/T 14853.1-1993 conducted

5.9 Determination of tensile strength and elongation of vulcanized rubber

5.9.1 Formulation of FZT series highly wettable rubber reinforcing fillers in natural rubber (see Table 2).

Table 2 Identification formula

Technical Specifications Natural rubber NK002 first grade tobacco flake glue 100.00 Stearic acid QB 523 first grade 3.00 Zinc oxide QB 318 first-class goods 5.00 Accelerator CZ HG2-478 first grade 0.80 Sulfur GB 2449 first grade 2.85 FZT reinforcing filler 40.00 Total 151.65 Note.

Tobacco sheet glue should be kept dry, clean, and strong, and there should be no rust, stickiness, bubbles, sand, oxidation spots or streaks, and no other foreign impurities.

5.9.2 Identification of the curing conditions of the formula.

a) Vulcanization temperature. $(143 \pm 1) ^\circ\text{C}$;

b) Vulcanization time. 10, 15, 20, 25 min.

5.9.3 Determination of tensile strength and elongation of vulcanized rubber 528-1992, GB/T 2941-1991, GB/T 3780.18-1988 and HG/T the requirements of 2198-1991 regarding equipment, preparation of carbon black samples, mixing, preparation of vulcanized rubber test pieces, and vulcanization procedures were carried out.

6 Inspection rules

6.1 The products can only be delivered after passing the inspection by the quality inspection department of the manufacturer and issuing a certificate of conformity. The items inspected at the factory are items 2, 4, and 6 in Table 1.

6.2 Each batch of products shall not exceed 50 t, within this range, randomly extract at least 1/2 of the total package number of complete original package products, averaged from each package Sampling, a total of about 2 samples kg.

6.3 Mix the sampled products evenly, use the quartile method to divide them, and take 2 parts into dry, clean, and ground glass bottles.

Sign, indicate the batch number, sampling date, one bottle sent to the inspection department for inspection, the other bottle stored 30 d, for re-inspection.

6.4 If the product does not meet the specified indicators after inspection, it shall be re-sampled for re-inspection of the non-conforming items.

Grid products.

7 Marking, packaging, transportation, storage

7.1 Signs

The front of the packaging bag should be marked with the color of the product name, model, trademark, batch number, net weight, manufacturer name, production date, and execution standard Number, etc.

7.2 Packaging