

KES

Analysis of Filler Contents
for Rubber Product

KES T – M132

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1. Scope of Application

This standard shall specify an analysis method of the filler contents for rubber products.

2. Refree-Ash Method

2.1 Apparatus

- (1) Crucible : A chinaware crucible, which capacity is 50mℓ.
- (2) Electric furnace : The one, which can be maintained at $550 \pm 25^{\circ}\text{C}$.

2.2 Method

- (1) Weigh 1gr of specimen exactly and put in the chinaware crucible.
- (2) After keeping the temperature of the electric furnace at $550 \pm 25^{\circ}\text{C}$, put the chinaware crucible in, which includes the specimen.
- (3) Close the door of electric furnace, keep it for about 1 hour, open the door about 3 ~ 5 cm, leave for about 30 minutes, and burn the carbon components completely.
- (4) After taking out the crucible from the electric furnace, cool down in a desiccator to the room temperature, and measure the weight.

2.3 Calculation

$$\text{Filler content } r (\%) = [(A - B) / C] \times 100$$

Here, A : Filler content + Weight of crucible

B : Weight of crucible

C : Weight of specimen

3. Alternative Dry Ash Method

3.1 Apparatus

- (1) Crucible : A chinaware crucible, which capacity is 30 mℓ.
- (2) Asbestos plate : The one, which length and height are 10 cm, thickness is 0.6 cm, and has a hole in the center, which about 2/3 the chinaware crucible can be put.