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

GB/T 27970-2011

**Test method for weight loss of non-metallic gasket materials
upon exposure to elevated temperatures**

非金属垫片材料烧失量试验方法

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard corresponds to ASTM F495-99a (2004 confirmation) "gasket material loss on ignition test methods", its technical content are basically the same.

This standard ASTM F495-99a (2004 confirmed) compared to locally made the following modifications.

--- Chapter 1, "scope" of the re-write the 1.1, 1.2, 1.3 and 1.4 is deleted.

--- The second chapter, "This standard does not apply to the determination of the binder content." Placed in Chapter 1; deleted 1.2 "in International Units is the standard notation in brackets given for reference only, "and deleted all given in brackets in the text of the standard Imperial units and value;

--- Removed 1.3, 1.4 description of the risk and safety, as a warning on the front of the standard;

--- Deleted the Chapter 3, "meaning and purpose" and Chapter 11, "Image." the standard proposed by China Building Materials Federation.

The standard and non-metallic mineral products by the National Standardization Technical Committee (SAC/TC406) centralized.

This standard was drafted. Zhejiang Cathay Pacific sealing materials Co., Ltd., Zhoushan seamounts sealed Material Co., Ltd., Xianyang non-metallic minerals Research and Design Institute Co., Ltd., China Mallorca (Shanghai) Co., Ltd., China National Institute of Standardization, riders Liangshan Auto Parts Manufacturing Co., the company.

1 Scope

This standard specifies the test methods for gasket materials under different temperatures of the loss on ignition.

This standard applies to non-metallic gasket materials burn Determination of loss. This standard does not apply to the determination of the content of adhesives used.

2 Test device

2.1

Muffle furnace. capable of maintaining a temperature range from 315 °C ~ 815 °C, the accuracy of ± 5 °C.

2.2

porcelain crucible.

2.3

Analytical balance. accuracy 0.01g.

2.4

dryer. containing anhydrous calcium chloride or silica gel.

2.5

air circulation oven. can be maintained at $100\text{ °C} \pm 2\text{ °C}$.

3 Sample

Sample mass 5g ~ 10g. Specimens should be cut no more than 12.7mm x 12.7mm square.

4 Sample adjustment

Bake good specimen cut or crushed into a crucible placed in an air circulating oven at 100 °C 1h, then placed in a desiccator to cool down 21 °C ~ 30 °C.

5 Number of tests

Cut sample taken from the same individual specimen, and make at least three tests were averaged, except otherwise agreed by both parties.

6 Test Procedure

6.1

Clean crucible at a predetermined temperature heating 30min, and then into the dryer to cool to 21 °C ~ 30 °C, the analysis of the balance Weighing, denoted by W1.

Samples were adjusted by 5.1 6.2 put in a crucible, and the crucible was weighed sample, denoted as W2.

6.3

sample placed in a crucible and a given temperature muffle furnace burning 60min $\pm$ 1min, out into the dryer to cool to 21 °C ~ 30 °C, Weigh the crucible and the sample, referred to as W3.

For the test of 815 °C, the sample from the initial combustion in the crucible to the combustion is completed. Use exhaust hood.

NOTE: Before crucible placed in a muffle furnace, if the sample burned most organic life muffle furnace heating element will be greatly extended.