KES

Analysis of Acrylonitrile for NBR Rubber

KES T – M157

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1. Scope of Application

This standard shall specify the quantitative analysis method of combination acrylonitrile for NBR Rubber.

2. Measuring Equipment

Semimicro-Kjeldahl equipment

3. Preparation of specimen

Cut the specimen(±2gr) fine about 2 ×2 ×10mm extent, clean a 500 ㎖ Erlenmeyer flask with them, add 150 ㎖ of methyl alcohol, reflux at least 1~2 hour, then pour out solvent, and wipe off twice by a dash of solvent.

Clean the specimen by filter paper, and dry them 2 hours in the air circulation dryer. (110±1℃)

4. Test Procedure

(1) Put 100mg specimen which gauge accurately in a 200 ㎖ Kendall flask, add 2.7gr of catalyst and boiling stone, then pour 4 ㎖ of strong sulfuric acid in subject matters that make wet equally, and leave them to show the bottom of the flask.

(2) Heat and resolve until liquid become transparent, after then, shake the flask to wipe off un-reacted matter.

(3) Heating at the time of decomposition is fine that heat weakly at the beginning, then heat strongly and slowly, 30 minute is sufficient.

* A manufacturing process of catalyst : Mix 120gr of sulfuric acid potassium and 15gr mercuric oxide, and shatter sufficiently in the mortar.

(4) Next, cool down the flask, add attentively 20 ㎖ of distilled water, connect a distillation apparatus that was gone though the vapor sufficiently.

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