



Fluff

Heat treatment for ageing tests

1 Scope

This SCAN-test Method specifies conditions for the heat treatment of fluff. It is intended for use when the physical properties of fluff are determined before and after heat treatment, in order to evaluate the ageing properties of the fluff and of products manufactured from it.

The Method is applicable to all kinds of fluff, including those prepared in the laboratory for testing purposes.

2 References

ISO 187 Paper, board and pulps – Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples

Note – SCAN-test has withdrawn a number of test methods and refers instead to the corresponding ISO and/or EN Standards.

3 Principle

The fluff is heated in air at 105 °C for 3 h.

4 Apparatus

4.1 *Oven*, controlled at a temperature of 105 °C ± 2 °C. When closed, the oven shall attain the prescribed temperature within 15 min after it has been opened for the introduction of the samples.

4.2 *Dishes or trays* of inert material, having the capacity to accommodate and retain the amount of fluff required for the relevant determinations.

5 Procedure

In the dishes or trays (4.2), place the amount of air-dry fluff required. When the oven (4.1) has reached the prescribed temperature, open it and introduce the dishes (or trays) as quickly as possible. Do not introduce more dishes than the oven can accept, acc. to the condition prescribed in 4.1.

Close the oven door and note the time. During the heat treatment, do not open the oven door.

After (180 ± 5) min remove the samples and condition them at 23 °C and 50 % relative humidity as specified in ISO 187. Do not start any tests with the heat-treated fluff unless it has been in contact with the conditioned air for at least 30 min.

6 Report

In the report, state that heat treatment has been carried out as specified in this SCAN-test Method. The report should include the results obtained for both the heat treated and the untreated sample, and not merely the ratio between them such as the percentage deterioration.

Note – When the influence of heat treatment is being investigated, it is generally advisable to plan the experiments so that heat treated and untreated samples are tested in parallel.

SCAN-test Methods are issued and recommended by KCL, PFI and STFI-Packforsk for the pulp, paper and board industries in Finland, Norway and Sweden.
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