

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 585

PLASTICS

DETERMINATION OF THE MOISTURE CONTENT
OF NON-PLASTICIZED CELLULOSE ACETATE

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 585, *Plastics – Determination of the Moisture Content of Non-plasticized Cellulose Acetate*, was drawn up by Technical Committee ISO/TC 61, *Plastics*, the Secretariat of which is held by the United States of America Standards Institute (USASI).

Work on this question by the Technical Committee began in 1961 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In March 1964, this Draft ISO Recommendation (No. 755) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Argentina	Israel	Spain
Australia	Italy	Sweden
Austria	Japan	Switzerland
Belgium	Korea, Rep. of	Turkey
Canada	Morocco	U.A.R.
Czechoslovakia	Netherlands	United Kingdom
Finland	New-Zealand	U.S.A.
France	Poland	U.S.S.R.
Germany	Republic	
Hungary	of South Africa	
India	Romania	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in July 1967, to accept it as an ISO RECOMMENDATION.

PLASTICS

**DETERMINATION OF THE MOISTURE CONTENT
OF NON-PLASTICIZED CELLULOSE ACETATE****1. SCOPE**

- 1.1 This ISO Recommendation describes a test method to determine the moisture content of non-plasticized cellulose acetate by drying at 105 °C in a thermostatic oven. The moisture content is calculated from the loss of mass of the test sample.
- 1.2 This determination may be required for the calculation of the dry mass of the cellulose acetate used in analytical methods.
- 1.3 This method applies only to cellulose acetate with a moisture content of not more than 10%.

2. APPARATUS

The apparatus should consist of the following:

- (a) *glass weighing bottle*, low wide form, with a ground-glass stopper,
- (b) *desiccator* containing anhydrous calcium chloride,
- (c) *thermostatic oven* maintained at 105 ± 2 °C,
- (d) *balance* accurate to 0.0001 g.

3. PROCEDURE

- 3.1 Dry the weighing bottle and its ground-glass stopper in the oven at 105 °C for half an hour, cool in the desiccator and weigh to the nearest 0.001 g.

Weigh a sample of approximately 5 g cellulose acetate to the nearest 0.001 g in the weighing bottle.

Introduce the weighing bottle containing the sample, with the stopper removed, into the oven at 105 °C.

Remove the weighing bottle from the oven after three hours, cover with the ground-glass stopper, cool in the desiccator and then re-weigh to the nearest 0.001 g.

- 3.2 Two determinations should be made. If the difference in percentage moisture content between the two is more than 0.1, the test should be repeated.