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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1269

PLASTICS

PVC RESINS

DETERMINATION OF VOLATILE MATTER (INCLUDING WATER)

1st EDITION

October 1970

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BRIEF HISTORY

The ISO Recommendation R 1269, *Plastics – PVC resins – Determination of volatile matter (including water)*, was drawn up by Technical Committee ISO/TC 61, *Plastics*, the Secretariat of which is held by the American National Standards Institute (ANSI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1269, which was circulated to all the ISO Member Bodies for enquiry in May 1967. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Austria	Iran	South Africa, Rep. of
Belgium	Israel	Spain
Bulgaria	Italy	Sweden
Canada	Japan	Turkey
Czechoslovakia	Korea, Dem. P. Rep. of	U.A.R.
France	Korea, Rep. of	United Kingdom
Germany	Netherlands	U.S.A.
Greece	New Zealand	Yugoslavia
Hungary	Poland	
India	Romania	

The following Member Bodies opposed the approval of the Draft :

Australia
Switzerland

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

ISO Recommendation | R 1269 | October 1970

PLASTICS

PVC RESINS

DETERMINATION OF VOLATILE MATTER (INCLUDING WATER)

1. SCOPE

This ISO Recommendation describes a method of determining the volatile matter (including water) in PVC resins.

2. PRINCIPLE

Heating at 110 ± 2 °C, to constant mass, of a given quantity of resin spread out in a weighing dish of specified dimensions.

3. APPARATUS

3.1 *Oven,* controlled at 110 ± 2 °C, with slight natural draught.

3.2 *Weighing dish,* shallow, about 80 mm in diameter and 30 mm in height, of glass, aluminium or, preferably, stainless steel, with lid.

3.3 *Balance,* accurate to 0.0001 g.

3.4 *Desiccator* containing a suitable desiccant.

4. PROCEDURE

Weigh the dish (3.2) with its lid to the nearest 0.0005 g, after heating it in the oven at 110 ± 2 °C for 1 hour and cooling it to room temperature in the desiccator (3.4).

Spread evenly over the bottom of the dish a mass m (about 5 g) of resin, replace the lid and weigh to the nearest 0.0005 g.

Place the assembly in the oven (3.1) at 110 ± 2 °C, remove the cover, leave it in the oven and close the oven door.

After 1 hour remove the assembly, cool in the desiccator and weigh to the nearest 0.0005 g. Heat for further half-hour periods until constant mass is obtained, i.e. until successive weighings do not differ by more than 0.0005 g (the lid must be kept on during transfer and weighing). From this calculate the mass m' of the residue.

Carry out two determinations.

Calculate the values of the percentage of volatile matter from the formula in section 5.

If these two percentages differ by less than 0.10 % in *absolute* value, use them for the calculation.

If not, carry out further determinations until two values satisfying this requirement are obtained.

However, if the two absolute values obtained are each less than 0.30 % – no matter what the difference between them – new determinations are not necessary.