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ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 172

PLASTICS

DETECTION OF FREE AMMONIA IN PHENOL FORMALDEHYDE MOULDINGS

QUALITATIVE METHOD

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 172, *Detection of Free Ammonia in Phenol Formaldehyde Mouldings. Qualitative Method*, was drawn up by Technical Committee ISO/TC 61, *Plastics*, the Secretariat of which is held by the American Standards Association, Incorporated (ASA).

Work on this matter which the Technical Committee had begun since 1954, came to an end in 1956, with the adoption of a proposal as a Draft ISO Recommendation.

On 28 November 1958, the Draft ISO Recommendation (No. 187) was distributed to all the ISO Member Bodies and was approved, subject to some editorial amendments, by the following Member Bodies:

Australia	Hungary	Romania
Austria	India	Spain
Belgium	Israel	Sweden
Bulgaria	Italy	Switzerland
Burma	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
France	Poland	U.S.A.
Germany	Portugal	U.S.S.R.

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 February 1961, to accept it as an ISO RECOMMENDATION.

ISO Recommendation R 172 February 1961

PLASTICS

DETECTION OF FREE AMMONIA IN PHENOL FORMALDEHYDE MOULDINGS

QUALITATIVE METHOD

1. SCOPE

The purpose of this ISO Recommendation is to describe a qualitative method of detecting the presence of free ammonia or other volatile bases in phenol-formaldehyde mouldings by the exposure of an indicator paper to the vapour from a powdered sample. It may be used when it is a requirement that free ammonia should be entirely absent.

2. APPARATUS

The apparatus consists of the following:

2.1 *Means* of reducing the moulding to a powder

2.2 *Balance*, to weigh to 0.01 g

2.3 *Flask*, 50 ml, glass-stoppered.

3. PROCEDURE

The moulded material is reduced to a powder by any convenient means, care being taken to avoid overheating. Without delay a sample of approximately 1 g of the powdered material is placed in the 50 ml flask.

The flask is quickly stoppered, a strip of universal indicator paper moistened with distilled water being placed between the stopper and the flask so that the end projects into the flask.

Care should be taken that the paper does not come into contact with the sample.

After half an hour the colour of the indicator paper is examined and a note made of any change.

4. REPORT

If the indicator paper does not change colour, it is reported that the moulding does not contain free ammonia or other volatile bases.

If the indicator paper changes colour, indicating the presence of alkaline vapours, it is reported that the moulding contains free ammonia or other volatile bases.