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ISO RECOMMENDATION

R 2053

POTASSIUM CHLORIDE FOR INDUSTRIAL USE

DETERMINATION OF MOISTURE CONTENT

GRAVIMETRIC METHOD

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 2053, *Potassium chloride for industrial use – Determination of moisture content – Gravimetric method*, was drawn up by Technical Committee ISO/TC 47, *Chemistry*, the Secretariat of which is held by the Ente Nazionale Italiano di Unificazione (UNI).

Work on this question led to the adoption of Draft ISO Recommendation No. 2053, which was circulated to all the ISO Member Bodies for enquiry in July 1970.

The Draft was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Austria	Iran	Spain
Belgium	Israel	Switzerland
Chile	Italy	Thailand
Czechoslovakia	Korea, Rep. of	U.A.R.
France	Netherlands	United Kingdom
Germany	New Zealand	U.S.A.
Greece	Poland	U.S.S.R.
Hungary	Portugal	
India	South Africa, Rep. of	

No Member Body opposed the approval of the Draft.

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

ISO Recommandation R 2053 August 1971

POTASSIUM CHLORIDE FOR INDUSTRIAL USE

DETERMINATION OF MOISTURE CONTENT

GRAVIMETRIC METHOD

1. SCOPE

This ISO Recommendation describes a method for the gravimetric determination of the moisture content of potassium chloride for industrial use.

2. FIELD OF APPLICATION

The method described is applicable to the determination of the moisture content of potassium chloride for industrial use, i.e. in a product with a minumum KCl content of about 95 %. This limit, conventionnally expressed as K_2O, corresponds to about 60 %.

3. PRINCIPLE

Drying of the test portion in an oven at 105 ± 2 °C to constant mass.

4. APPARATUS

Ordinary laboratory apparatus and

4.1 *Weighing vessel*, shallow, 80 mm x 40 mm, with lid.

4.2 *Electric oven*, capable of being controlled at 105 ± 2 °C.

4.3 *Desiccator*, filled with an appropriate desiccant (for example : silica gel, phosphorus pentoxide, etc).

5. PROCEDURE

5.1 Preparation of the sample

The moisture content should be determined on the product as received i.e. unground. It is, therefore, sufficient to carry out a rough division, taking the necessary precautions to avoid any loss or pick-up of water from the atmosphere.

5.2 Test portion

Weigh, to the nearest 0.001 g, about 25 g of the sample (5.1) in the weighing vessel (4.1) previously dried at 105 ± 2 °C, cooled in the desiccator (4.3) and weighed.

5.3 Determination

Place the open weighing vessel containing the test portion (5.2), together with the lid, in the oven (4.2) regulated at 105 ± 2 °C. Allow to remain until the mass is constant. Carry out several weighing operations at regular intervals, taking the precaution before each weighing to close the weighing vessel and to allow it to cool in the desiccator (4.3). Two consecutive weighing operations carried out at an interval of about 1 hour should not show a difference of more than 2 mg.

NOTE. – Carry out at least two determinations and take the mean.