

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 746

SODIUM CARBONATE FOR INDUSTRIAL USE

DETERMINATION OF MATTER INSOLUBLE IN WATER AT 50 °C

1st EDITION

May 1968

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BRIEF HISTORY

The ISO Recommendation R 746, *Sodium carbonate for industrial use – Determination of matter insoluble in water at 50 °C*, 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 by the Technical Committee began in 1951 and led, in 1956, to the adoption of a Draft ISO Recommendation.

In June 1966, this Draft ISO Recommendation (No. 1012) 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	Italy	Spain
Austria	Japan	Switzerland
Belgium	Korea, Rep. of	Turkey
Brazil	Netherlands	U. A. R.
Chile	New Zealand	United Kingdom
Czechoslovakia	Poland	U. S. A.
France	Portugal	U. S. S. R.
Germany	Romania	Yugoslavia
Hungary	South Africa,	
India	Rep. of	

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 May 1968, to accept it as an ISO RECOMMENDATION.

SODIUM CARBONATE FOR INDUSTRIAL USE

DETERMINATION OF MATTER INSOLUBLE IN WATER AT 50 °C

1. SCOPE

This ISO Recommendation describes a method for the determination of matter insoluble in water at a temperature of 50 °C in sodium carbonate for industrial use.

2. PRINCIPLE

Dissolution of a test portion. Filtration of the solution through a tared filter. Washing of the insoluble matter at a temperature of approximately 50 °C until the washings are no longer alkaline. Drying of the residue and weighing.

3. REAGENTS

Distilled water or water of equivalent purity should be used in the test.

- 3.1 *Phenolphthalein*, 10 g/l ethanolic solution. Dissolve 1 g of phenolphthalein in 95 % (v/v) ethanol and dilute to 100 ml with the same ethanol.

4. APPARATUS

Ordinary laboratory apparatus and

- 4.1 *Glass filter crucible*, with sintered disk of porosity between 5 and 15 μm .

5. PROCEDURE

5.1 Test portion

Weigh, to the nearest 0.01 g, 50 ± 0.1 g of the test sample*.

5.2 Determination

Dissolve the test portion by adding small quantities at a time to a beaker of suitable capacity (600 ml for example) containing 200 ml of water heated to a temperature of approximately 50 °C. Stir during the operation.

Place the crucible (4.1) in an oven controlled at a temperature of 110 ± 5 °C. After drying for 1 hour, remove it, allow to cool in a desiccator and weigh.

* See clause 2.2 of ISO Recommendation R 739, *Sodium carbonate for industrial use – Preparation and storage of test samples*.