

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 907

HYDROCHLORIC ACID FOR INDUSTRIAL USE

DETERMINATION OF SULPHATED ASH

GRAVIMETRIC METHOD

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 907, *Hydrochloric acid for industrial use – Determination of sulphated ash – 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).

Based on detailed work on this question carried out by the Technical Committee, a Draft ISO Recommendation was adopted in 1965.

In June 1967, this Draft ISO Recommendation (No. 1177) 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 :

Austria	Iran	South Africa, Rep. of
Belgium	Ireland	Spain
Bulgaria	Israel	Switzerland
Chile	Italy	Thailand
Cuba	Japan	Turkey
Czechoslovakia	Korea, Dem.P. Rep. of	U.A.R.
France	Netherlands	United Kingdom
Germany	New Zealand	U.S.S.R.
Hungary	Poland	Yugoslavia
ICAITI*	Portugal	
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 December 1968, to accept it as an ISO RECOMMENDATION.

* Instituto Centroamericano de Investigación y Tecnología Industrial (Costa Rica, Guatemala, Honduras, Nicaragua, El Savador, Panama).

HYDROCHLORIC ACID FOR INDUSTRIAL USE

DETERMINATION OF SULPHATED ASH

GRAVIMETRIC METHOD

1. SCOPE

This ISO Recommendation describes a gravimetric method for the determination of sulphated ash of hydrochloric acid for industrial use.

2. PRINCIPLE

Evaporation of a test portion; conversion to sulphates by treatment with sulphuric acid; ignition at 800 °C and weighing.

3. REAGENT

Sulphuric acid, approximately $d = 1.84$, 96 % (m/m) or 36 N solution.

4. APPARATUS

Ordinary laboratory apparatus and

4.1 *Platinum dish*, flat-bottomed, capacity approximately 200 ml.

4.2 *Electric furnace*, regulated at 800 ± 50 °C.

5. PROCEDURE

5.1 Test portion

In the platinum dish (4.1), previously ignited at 800 °C, cooled in a desiccator and weighed, weigh, to the nearest 10 mg, approximately 100 g of the test sample.

5.2 Determination

Evaporate most of the acid (the final volume should amount to about 5 to 10 ml) by carefully heating the dish containing the test portion (on a sand bath, for example). Then allow to cool to room temperature.

Take up by means of 1 ml of the sulphuric acid solution (3) and heat to dryness.

Place the dish containing the residue in the electric furnace (4.2), heated at 800 ± 50 °C, and keep at this temperature for about 15 minutes.

Remove the dish from the furnace, place into a desiccator and, after cooling, weigh.