

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 802

ALUMINIUM OXIDE PRIMARILY USED
FOR THE PRODUCTION OF ALUMINIUM

PREPARATION AND STORAGE OF TEST SAMPLES

1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 802, *Aluminium oxide primarily used for the production of aluminium – Preparation and storage of test samples*, 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 1961 and led, in 1964, to the adoption of a Draft ISO Recommendation.

In July 1966, this Draft ISO Recommendation (No. 1024) 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	Ireland	Sweden
Austria	Israel	Switzerland
Belgium	Italy	Turkey
Brazil	Japan	U.A.R.
Bulgaria	Korea, Rep. of	United Kingdom
Canada	Netherlands	U.S.A.
Chile	Norway	U.S.S.R.
Czechoslovakia	Poland	Yugoslavia
France	Romania	
Germany	South Africa,	
Hungary	Rep. of	
India	Spain	

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 August 1968, to accept it as an ISO RECOMMENDATION.

ALUMINIUM OXIDE PRIMARILY USED FOR THE PRODUCTION OF ALUMINIUM

PREPARATION AND STORAGE OF TEST SAMPLES

1. SCOPE

This ISO Recommendation describes the procedure for preparation and storage of test samples, i.e. crude sample and dried sample.

2. PREPARATION OF TEST SAMPLES

2.1 Laboratory sample

The method described in ISO Recommendation R . . .*, for preparation of laboratory sample should be followed.

2.2 Crude sample for the determination of certain geometrical characteristics, for certain physical and physico-chemical tests and for moisture determination

Take approximately 300 g of the laboratory sample and place it in an air-tight container of such a capacity that it is nearly filled by the sample.

2.3 Dried sample for chemical tests and the determination of certain geometrical characteristics and for certain physical and physico-chemical tests

2.3.1 **Principle.** Grinding followed by sieving of the sample until the whole passes through a 0.2 mm sieve. Thorough mixing and drying at approximately 300 °C.

2.3.2 **Apparatus.** Ordinary laboratory apparatus and

2.3.2.1 *Sieve*, 0.2 mm aperture, made of material that cannot cause introduction of the impurities to be determined**.

2.3.2.2 *Corundum mortar*.

2.3.2.3 *Electric oven*, ventilated by convection and controlled at 300 ± 10 °C.

2.3.2.4 *Desiccator*, preferably containing freshly activated alumina or phosphorus pentoxide (the use of calcium chloride should be avoided).

* The preparation of an ISO Recommendation dealing with sampling from the consignment of the products will be undertaken as soon as the relevant ISO Technical Committee specifies the general procedure to be followed.

** The sieve should be selected in relation to the nature of the aluminium oxide and impurities to be determined.