

## INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ ORGANISATION INTERNATIONALE DE NORMALISATION

# Potassium hydroxide for industrial use — Sampling — Test sample — Preparation of the main solution for carrying out certain determinations

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## FOREWORD

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It has been approved by the Member Bodies of the following complex :

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- India Ireland Israel Italy Netherlands New Zealand Poland Portugal
- Romania South Africa, Rep. of Spain Sweden Switzerland Thailand United Kingdom U.S.S.R.

No Member Body expressed disapproval of the document.

nerated by FLY-This International Standard cancels and replaces ISO Recommendations R 988-1969. Potassium hydroxide for industrial use – Preparation and storage of test sample, and R 989-1969, Potassium hydroxide for industrial use - Preparation of sample solution.

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## Potassium hydroxide for industrial use — Sampling — Test sample — Preparation of the main solution for carrying out certain determinations

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard provides certain indications relating to the sampling of quantities potassium hydroxide, indicates the conditions under which the test sample should be prepared, and describes a method for the preparation of the main solution to be used for carrying out certain determinations.

#### 2 LABORATORY SAMPLE

**2.1** The particular properties of potassium hydroxide which make special precautions essential should be stressed : hygroscopic characteristics, ability to absorb carbon dioxide, corrosive action on containers. These properties make it necessary that :

- samples shall be taken rapidly in a dry atmosphere;
- the laboratory sample shall be stored in an airtight bottle, protected from contact with the atmosphere;

- the bottle shall be made of a made of a material that does not contaminate the sample with the elements to be determined (for example, a silica-free material such as polyethylene, if the determination of silica content is intended).

**2.2** For the methods of sampling, and the number of portions to be drawn from a given quantity, see ISO  $\dots^{1}$ .

#### **3 TEST SAMPLE**

**3.1** The laboratory sample shall be protected from the atmosphere and handled in such a way that no appreciable absorption of moisture or carbon dioxide is possible during the operations.

Crushing or grinding in a mortar, if necessary, shall be carried out in the minimum time, in an atmosphere as dry as possible.

It is recommended that these operations should be carried out in a "glove box" fitted with gauntlets, from which moisture and carbon dioxide have been removed by the introduction, at least 1 h before the sample is treated, of flat dishes containing phosphorus pentoxide and potassium hydroxide pellets.

**3.2** Take about 300 g of the laboratory sample and, in the (as) of a solid product, grind it, if necessary, to ensure that the brgest dimension of the pieces does not exceed about 6 mm. Place the sample in an airtight container, composed of a material that does not contaminate the product with the elements to be determined and of such a capacity that it is almost completely filled.

The containers shall bear a label, with protective coating, indicating :

- the origin and dentification of the test sample;
- the date on which it was placed in the container.



4 PREPARATION OF THE MAIN SOLUTION FOR CARRYING OUT CERTAIN DETERMINATIONS (SOLUTION A)

### 4.1 Test portion

In a weighing bottle fitted with a ground lid, weigh, to the nearest 0,01 g, a mass of the solid or liquid test sample corresponding to approximately 50 g of KOH.

<sup>1)</sup> In preparation.