

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1686

SODIUM AND POTASSIUM SILICATES
FOR INDUSTRIAL USE

SAMPLES AND METHODS OF TEST
GENERAL

1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 1686, *Sodium and potassium silicates for industrial use – Samples and methods of test – General*, 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. 1686 which was circulated to all the ISO Member Bodies for enquiry in December 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	India	Romania
Austria	Iran	South Africa, Rep. of
Belgium	Israel	Spain
Brazil	Italy	Switzerland
Colombia	Japan	Thailand
Czechoslovakia	Netherlands	Turkey
France	New Zealand	U.A.R.
Germany	Peru	United Kingdom
Greece	Poland	U.S.S.R.
Hungary	Portugal	Yugoslavia

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.

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GENERAL

1. SCOPE

This ISO Recommendation describes general provisions relating to the treatment of samples and to the methods of test for potassium and sodium silicates for industrial use.

2. GENERAL

- 2.1 The methods described apply directly to sodium and potassium silicates in solution or that are soluble in boiling water. In the case of solid chemicals that are not readily soluble in boiling water, a special preliminary solution treatment is necessary*.
- 2.2 If it is proposed to carry out all the standardized tests, it is necessary to have a representative sample of approximately 750 g.
Precautions should be taken in order to avoid absorption of moisture and carbon dioxide by the samples, and it is advisable to store them in sealed containers. In the case of solid chemicals, the lumps, if any, should be crushed before mixing; precautions should be taken in order to avoid the absorption of moisture and carbon dioxide during crushing.
- 2.3 It is assumed that, during the analyses, all the volumes are related to or measured at a temperature of approximately 20 °C, that titrations and final reactions of the determinations are also carried out at this temperature and that dilutions are carried out with distilled water or water of equal purity.
- 2.4 If the determinations require the introduction of reagents, in order to avoid incorrect results, reagents of "analytical reagent grade" should be used; these reagents should also be free from or contain only a negligible content of the impurity which it is intended to determine.

* See ISO Recommendation R 2122, *Sodium and potassium silicates for industrial use - Preparation of solution of products not easily soluble in boiling water and determination of matter insoluble in water.* (In preparation.)