UDC 661.725.6 : 546.212

Ref. No. : ISO/R 1849-1970 (E)

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1849

HIGHER ALCOHOLS FOR INDUSTRIAL USE

DETERMINATION OF WATER CONTENT

BY THE KARL FISCHER METHOD

1st EDITION

November 1970

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 1849, *Higher alcohols for industrial use – Determination of water content by the Karl Fischer 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).

Work on this question led to the adoption of Draft ISO Recommendation No. 1849, which was circulated to all the ISO Member Bodies for enquiry in April 1969. 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
Czechoslovakia	Netherlands	Turkey
France	New Zealand	U.A.R.
Germany	Peru	United Kingdom
Greece	Poland	U.S.S.R.
Hungary	Portugal	

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.

ISO Recommendation R 1849 November 1970

HIGHER ALCOHOLS FOR INDUSTRIAL USE

DETERMINATION OF WATER CONTENT BY THE KARL FISCHER METHOD

1. SCOPE

This ISO Recommendation describes the determination of water content by the Karl Fischer method of C_6 to C_{13} alcohols for industrial use.

2. SAMPLING

Follow the principles given in ISO Recommendation R . . .*.

Place the sample in a clean, dry, glass-stoppered bottle of such a size that it is nearly filled up. If it is necessary to seal this bottle, care should be taken to avoid the risk of contamination.

3. PROCEDURE

Use one of the methods described in ISO Recommendation R 760, *Determination of water by the Karl Fischer method*, taking a test portion of 20 ml.

4. TEST REPORT

The test report should give the following particulars :

(*a*) the reference of the method used;

(*b*) the results and the method of expression used;

(*c*) any unusual features noted during the determination;

(*d*) any operation not included in this ISO Recommendation or regarded as optional.

* Sampling from the consignment of a chemical product will be the subject of a future ISO Recommendation.

ANNEX

This document forms one of a series of ISO Recommendations on methods of test for C_6 to C_{13} alcohols; the complete list of Recommendations under the general title, *Higher alcohols for industrial use*, is as follows :

ISO/R 1843 *Measurement of colour in Hazen units.*

ISO/R 1844 *Determination of density at 20 °C.*

ISO/R 1845 *Determination of distillation yield.*

ISO/R 1846 *Determination of acidity to phenolphthalein.*

ISO/R 1847 *Determination of carbonyl compounds (Hydroxylammonium chloride potentiometric method).*

ISO/R 1848 *Determination of bromine index in the presence of mercury (II) chloride.*

ISO/R 1849 *Determination of water content by the Karl Fischer method.*

ISO/R 1850 *Determination of total alcohols content (Volumetric method).*

ISO/R 1851 *Determination of ash (Gravimetric method).*

ISO/R 1852 *Test for colour with sulphuric acid.*

NOTE. – A sample of the material not less than 750 ml is necessary to carry out the whole series of tests described in these documents.

Date of the first printing :
December 1970

Price based on 2 pages