INTERNATIONAL STANDARD 579

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Coke — Determination of total moisture

Coke — Détermination de l'humidité totale

First edition — 1974-10-01

UDC 662.749.2 : 543.812.2

Ref. No. ISO 579-1974 (E)

Descriptors : coke, chemical analysis, determination of content, moisture content, physical tests, tests.

Price based on 2 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 27 has reviewed ISO Recommendation R 579 and found it technically suitable for transformation. International Standard ISO 579 therefore replaces ISO Recommendation R 579-1967 to which it is technically identical.

ISO Recommendation R 579 was approved by the Member Bodies of the following countries :

Australia	Denmark	Philippines
Austria	Egypt, Arab Rep. of	Poland
Belgium	France	Romania
Brazil	Germany	Switzerland
Canada	India	Turkey
Chile	Italy	United Kingdom
Colombia	Korea, Rep. of	U.S.A.
Czechoslovakia	New Zealand	U.S.S.R.

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds :

South Africa, Rep. of*

No Member Body disapproved the transformation of ISO/R 579 into an International Standard.

* Subsequently, this Member Body approved the Recommendation.

Printed in Switzerland

Coke — Determination of total moisture

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method of determining the total moisture in coke.

2 REFERENCE

ISO 2309, *Coke — Sampling.*[1)]

3 PRINCIPLE

A sample of the coke is heated in air at 200 °C (see 9.1) and maintained at this temperature until constant in mass. The percentage moisture content is calculated from the loss in mass of the sample. Coke is not liable to oxidation under the conditions stated.

4 APPARATUS

4.1 Air oven, capable of maintaining a substantially uniform temperature zone at 200 °C (see 9.1) and in which the rate of atmosphere change is sufficiently rapid (see 9.2).

4.2 Tray, approximately 0,1 m^2 in area and 25 mm deep, made of non-corrodible material such as stainless steel, tinned steel or aluminium.

4.3 Weighing machine, sensitive to 1 g (see 9.3).

5 SAMPLE

The sample shall consist of 1 kg of coke (see 9.3), prepared in accordance with ISO 2309, and shall be received in a sealed air-tight container. During the course of its preparation the sample may have been air-dried, in which case a formula shall be used to calculate the total moisture content (see 9.4).

6 PROCEDURE

Weigh the sample and container as received to the nearest 0,1 %. Weigh the dry, empty tray, transfer the sample as completely as possible to the tray and spread evenly. Place the charged tray in the oven at a temperature of 200 °C (see 9.1). Dry the wet container with any sample adhering to it by warming, transfer the remaining sample to the tray and weigh the dry empty container (see 9.5). Heat the tray and its contents until constant in mass (see 9.6), weighing the tray hot to avoid absorption of moisture during cooling.

7 EXPRESSION OF RESULTS

The moisture (M) in the coke as analysed, as a percentage, is given by the formula

$$M = \frac{(m_1 - m_4) - (m_3 - m_2)}{(m_1 - m_4)} \times 100$$

where

m_1 is the mass, in grams, of the container plus sample as received;

1) At present at the stage of draft.