

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1042

ONE-MARK VOLUMETRIC FLASKS

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BRIEF HISTORY

The ISO Recommendation R 1042, *One-mark volumetric flasks*, was drawn up by Technical Committee ISO/TC 48, *Laboratory glassware and related apparatus*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question led to the adoption of a Draft ISO Recommendation.

In December 1963, this Draft ISO Recommendation (No. 697) 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	Greece	Spain
Australia	Hungary	Switzerland
Austria	India	Turkey
Belgium	Israel	U.A.R.
Brazil	Italy	United Kingdom
Canada	Japan	U.S.A.
Chile	Korea, Rep. of	U.S.S.R.
Colombia	Netherlands	Yugoslavia
Czechoslovakia	New Zealand	
France	Poland	

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 April 1969, to accept it as an ISO RECOMMENDATION.

ONE-MARK VOLUMETRIC FLASKS

1. SCOPE

This ISO Recommendation specifies requirements for an internationally acceptable series of one-mark volumetric flasks, suitable for general laboratory purposes.

The details specified are in conformity with ISO Recommendation R 384, *Principles of construction and adjustment of volumetric glassware*.

2. BASIS OF ADJUSTMENT

2.1 Unit of volume

The unit of volume should be the cubic centimetre (cm^3), for which the name millilitre (ml) may be used.

NOTE. — The term millilitre (ml) is commonly used as a special name for the cubic centimetre (cm^3), in accordance with a decision of the twelfth Conférence Générale des Poids et Mesures. The term millilitre is acceptable, in general, for references in ISO Recommendations to capacities of volumetric glassware and it is used, in particular, in the present text.

2.2 Reference temperature

The standard reference temperature, i.e. the temperature at which the volumetric flask is intended to contain its nominal volume (nominal capacity), should be 20 °C.

NOTE. — When the flask is required for use in a country which has adopted a standard reference temperature of 27° C, this value should be substituted for 20° C.

3. CLASSES OF ACCURACY

Two classes of accuracy are specified:

- Class A for the higher grade,
- Class B for the lower grade.

4. SERIES OF CAPACITIES

The series of capacities of one-mark volumetric flasks is as follows:

5, 10, 25, 50, 100, 200, 250, 500, 1000 and 2000 ml.

All these flasks may be finished with a plain neck or be provided with a stopper.

NOTE. — If volumetric flasks are required of capacities other than those listed above, it is recommended that they should conform, as far as possible, to the essential requirements of this ISO Recommendation.