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ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1769

COLOUR CODING FOR PIPETTES

1st EDITION

October 1970

For each individual country the only valid standard is the national standard of that country.

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

BRIEF HISTORY

The ISO Recommendation R 1769, *Colour coding for pipettes*, 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 Draft ISO Recommendation No. 1769, 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 :

Austria	Iran	Spain
Belgium	Israel	Thailand
Canada	Italy,	Turkey
Colombia	Korea, Dem.P.Rep. of	U.A.R.
Czechoslovakia	Netherlands	United Kingdom
France	New Zealand	U.S.A.
Germany	Peru	Yugoslavia
Greece	Poland	
India	South Africa, Rep. of	

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 1769 | October 1970

COLOUR CODING FOR PIPETTES

INTRODUCTION

In order to assist as rapidly as possible in harmonizing the coding systems already in existence and with a view to avoiding the appearance of other systems in the future, this ISO Recommendation is limited to the essential requirements. It is intended at a later date to consider the standardization of suitable requirements and test methods for the durability of the colours used for coding.

NOTE. – The purpose of this ISO Recommendation is to ensure that if a colour code is used on pipettes, all manufacturers will use the same code; it is not intended as an encouragement of colour coding if this is not required.

1. SCOPE

This ISO Recommendation specifies a system of colour coding for one-mark pipettes for identification of nominal capacities, and for graduated pipettes for identification of nominal capacities and units of sub-division.

2. SERIES OF CAPACITIES

This ISO Recommendation applies to one-mark and graduated pipettes of the nominal capacities listed in Tables 1 and 2 respectively.

NOTE. – Many pipettes not covered by ISO Recommendations are included in Tables 1 and 2, in order, firstly, to ensure uniformity of colour coding as far as possible for non-standard as well as standard pipettes and, secondly, to reserve suitable codes for possible future ISO Recommendations for other types of pipette.

3. COLOUR CODE

The colour coding used on one-mark pipettes should be in accordance with Table 1, and on graduated pipettes should be in accordance with Table 2.

4. COLOURS

Variations in the enamels used and in the methods of application appropriate for pipettes made from different types of glass inevitably result in minor variations of colour, and it is therefore not appropriate to specify closely the seven colours mentioned in the Tables.

5. METHOD OF MARKING

The colour code should take the form of colour bands extending at least 150° around the circumference of the pipette and situated not more than 70 mm from the top of the pipette and not less than 20 mm above the nearest graduation line.

For a code consisting of a single band of colour, the band should be 6 to 10 mm wide. For a code consisting of two bands of colour, each band should be 3 to 5 mm wide and the two bands should be separated by a space of 2 to 3 mm.

NOTE. – If it is desired to differentiate between graduated pipettes calibrated to deliver to a graduation line (Type 1) and those calibrated to deliver to the jet (Type 2), this should be done by adding above the main coding on the Type 1 pipettes an extra band 1 to 1.5 mm wide of the same colour.

6. DURABILITY

The colour band or bands should be reasonably durable under normal conditions of use.

NOTE. – Certain cleaning materials used with pipettes may alter or remove the colours to such an extent that the coding becomes ineffective; if circumstances necessitate the use of such cleaning materials, the portion of the pipette bearing the colour band or bands should not be immersed in the cleaning material.

TABLE 1 – **Coding system for one-mark pipettes**

Nominal capacity ml	Colour code bands
0.001	1 blue
0.002	2 red
0.003	1 yellow
0.004	2 green
0.005	1 white
0.01	1 orange
0.015	2 blue
0.02	1 black
0.025	2 white
0.03	2 yellow
0.035	2 black
0.04	2 red
0.05	1 green
0.075	2 orange
0.1	1 blue
0.15	1 white
0.2	1 red
0.25	2 green
0.3	1 yellow
0.4	2 red
0.5	2 black
1	1 blue
2	1 orange
3	1 black
4	2 red
5	1 white
6	2 orange
7	2 green
8	1 blue
9	1 black
10	1 red
15	1 green
20	1 yellow
25	1 blue
30	1 black
40	1 white
50	1 red
75	1 green
100	1 yellow
150	2 black
200	1 blue