

Method for

Assessing the efficacy of disinfectants by the modified Chick-Martin test

UDC [615.28 + 648.63]:615.076.7

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Disinfectant Standards Committee (DIC/-) to Technical Committee DIC/12, upon which the following bodies were represented:

- Association of Public Analysts
- British Association for Chemical Specialities
- British Food Manufacturing Industries Research Association
- British Medical Association
- Campden Food Preservation Research Association
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Hospital Infection Society
- Institute of Trading Standards Administration
- Institution of Environmental Health Officers
- Medical Research Council
- Public Health Laboratory Service
- Society for Applied Bacteriology
- Society of Chemical Industry

This British Standard, having been prepared under the direction of the Disinfectants Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 July 1986

© BSI 09-1999

First published September 1938
First revision July 1986

The following BSI references relate to the work on this standard:
Committee reference DIC/12
Draft for comment 85/52447 DC

ISBN 0 580 15267 7

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Principle	1
4 Sterilization	1
5 Reagents and materials	1
6 Apparatus	3
7 Preparation of test culture	3
8 Sampling and stock disinfectant solutions	3
9 Preliminary tests	4
10 Procedure	4
11 Calculation of phenol coefficient	4
12 Test report	5
Appendix A Preparation of disinfectant dilutions	6
Table 1 — Phenol working solutions: concentrations	2
Table 2 — Disinfectant test dilutions: concentrations	6
Publications referred to	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Disinfectants Standards Committee. It supersedes BS 808:1938, which is withdrawn.

The Chick-Martin test was devised at the Lister Institute and first described in 1908 (*J Hygiene*, 1908, **VIII**, 655). It was designed primarily to estimate the value of disinfectants to be used outside the body. An essential feature of the test is the inclusion of organic matter. As disinfectants have frequently to act in the presence of large amounts of organic matter, this feature of the test is of considerable practical importance. However it is alleged that the particular form of organic matter (dried faeces) used in the test was variable in character and unpleasant to handle.

When BSI was asked to prepare a British Standard based on the Chick-Martin test it constituted a committee to examine the possibility of substituting yeast for faeces in the test. The committee found that yeast was free from the objections alleged against faeces; it also found that further modifications of the original technique produced more consistent results. This work was published as BS 808:1938.

This revision of the test introduces the following main changes:

- a) replacement of the broth by Rideal-Walker broth, single-strength;
- b) replacement of the organism by *Salmonella typhi* (NCTC 786);
- c) deletion of the appendix giving the method for determination of the crystallizing point of the phenol, on the grounds that specification of analytical reagent grade is sufficient;
- d) modifications to the procedure for obtaining the yeast suspension, in order to obtain a more consistent material.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.