

SPECIFICATION FOR  
PRUSSIAN BLUES  
FOR PAINTS

THIS BRITISH STANDARD, having been approved by the Pigments, Paints and Varnishes Industry Standards Committee and endorsed by the Chairman of the Chemical Divisional Council, was published under the authority of the General Council on 29th January, 1965.

First published May, 1927.

First revision August, 1938.

Second revision March, 1953.

Third revision January, 1965.

The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 4000, fully indexed and with a note of the contents of each, will be found in the British Standards Yearbook, price 15s. The B.S. Yearbook may be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standards:

B.S. 1792. One-mark volumetric flasks.

B.S. 3483. Methods for testing pigments for paints.

B.S. 3591. Industrial methylated spirits.

*British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.*

The following B.S.I. references relate to the work on this standard:  
Committee reference PVC/1/8                      Draft for comment D64/1202

**CONTENTS**

	<b>Page</b>
Co-operating organizations	4
Foreword	5

**SPECIFICATION**

1. Scope and description	5
2. Sample	5
3. Agreed sample	6
4. Composition	6
5. Residue on sieve	6
6. Oil absorption value	6
7. Colour	7
8. Staining power and colour on reduction	7
9. Matter volatile at 100°C	7
10. Matter soluble in water	7
11. Acidity of aqueous extract	7

**APPENDICES**

A. Methods for the determination of basic iron, iron cyanogen complex and total iron	8
B. Method for the determination of matter soluble in water and acidity of the aqueous extract	11

## CO-OPERATING ORGANIZATIONS

The Pigments, Paints and Varnishes Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- \*Association of British Chemical Manufacturers  
Board of Trade
- \*British Colour Makers' Association  
British Railways Board
- \*Crown Agents for Oversea Governments and Administrations
- \*D.S.I.R.—Building Research Station  
D.S.I.R.—Laboratory of the Government Chemist
- \*Incorporated Institute of British Decorators and Interior Designers
- \*Lead Oxide Convention  
London County Council  
London Transport Board  
Ministry of Aviation
- \*Ministry of Defence, Army Department
- \*Ministry of Defence, Navy Department
- \*Ministry of Public Building and Works  
National Federation of Builders' and Plumbers' Merchants
- \*Oil and Colour Chemists' Association
- \*Paint Manufacturers' and Allied Trades Association
- \*Paintmakers' Association of Great Britain
- \*Post Office
- \*Research Association of British Paint, Colour and Varnish Manufacturers  
Royal Institute of British Architects  
Royal Institute of Public Health and Hygiene
- \*Titanium Pigment Manufacturers' Technical Committee
- \*White Lead Convention
- \*Zinc Development Association  
Zinc Pigment Development Association

The Government departments and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

Amalgamated Society of Painters and Decorators  
British Electrical and Allied Manufacturers' Association  
National Federation of Master Painters and Decorators of England and Wales

# BRITISH STANDARD SPECIFICATION FOR PRUSSIAN BLUES FOR PAINTS

## FOREWORD

This British Standard was originally published in 1927 and revisions were carried out in 1938 and 1953.

The main difference of the present standard from the 1953 edition is that provision has been made for the inclusion of materials treated with surface active agents to improve the working properties of the pigment. Because of the nature and variety of the treating agents used (and those which may be used in the future), it is considered impracticable at this stage to define these treating agents for the purposes of this standard. The specification also now includes a requirement for residue on sieve without, however, specifying a limit because this characteristic depends on the method of manufacture of the material which itself depends on the intended use of the material.

The methods of test are, wherever relevant, those in B.S. 3483, 'Methods for testing pigments for paints'.

## SPECIFICATION

### SCOPE AND DESCRIPTION

1. This British Standard applies to Prussian blues of the bronzing and non-bronzing types for use in paints. The material shall consist solely of the blue product formed by the reaction of solutions of iron salts with ferrocyanide or ferricyanide solutions followed when necessary by treatment with oxidizing agents except that the inclusion of surface active agents is permitted to improve the pigmentary properties of the material.

It shall be in the form of a dry powder or in such a condition that it may be readily reduced thereto by crushing under a palette knife, without necessitating any grinding action.

### SAMPLE

2. Representative samples shall be taken from not less than 10 per cent of the original and previously unopened containers selected at random. The material shall be thoroughly mixed and shall then be divided into triplicate samples weighing not less than 450 g each. These shall be packed in clean, dry, airtight,