

Specification for

Pressboard and presspaper for electrical purposes

Part 3. Specifications for individual materials

**Sheet 1. Requirements for pressboard,
types B.0.1, B.2.1, B.2.3, B.3.1, B.3.3,
B.4.1, B.4.3, B.5.1, B.6.1 and B.7.1**

The European Standard EN 60641-3-1 : 1994 has the status of a
British Standard

UDC 621.315.6

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the national committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 December 1994

© BSI 1994

Amendments issued since publication

Amd. No.	Date	Text affected

The following BSI references relate to the work on this standard:
Committee reference CIL/15/3
Special announcement in *BSI News* September 1994

ISBN 0 580 23524 6

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	i
Foreword	2
Text of EN 60641-3-1	3
National annex NA (informative) Committees responsible	Inside back cover
National annex NB (informative) Cross-references	Inside back cover

National foreword

This British Standard has been prepared under the direction of the Electrotechnical Sector Board and is the English language version of EN 60641-3-1 : 1994 *Specification for pressboard and presspaper for electrical purposes. Part 3: Specifications for individual materials — Sheet 1: Requirements for pressboard, types B.0.1, B.2.1, B.2.3, B.3.1, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 and B.7.1*, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 641-3-1 : 1992 published by the International Electrotechnical Commission (IEC).

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

UDC 621.315.6

Descriptors: Presspaper, mouldable, calendered, precompressed, designation, requirement

English version

Specification for pressboard and presspaper for electrical purposes

Part 3: Specifications for individual materials

Sheet 1: Requirements for pressboard, types B.0.1, B.2.1, B.2.3, B.3.1, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 and B.7.1 (IEC 641-3-1 : 1992)

Spécifications pour le carton comprimé et le papier comprimé à usages électriques
Partie 3: Spécifications pour matériaux particuliers
Feuille 1: Prescriptions pour carton comprimé, types B.0.1, B.2.1, B.2.3, B.3.1, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 et B.7.1
(CEI 641-3-1 : 1992)

Spezifikation für Preßspan und Preßpapier für elektrische Zwecke
Teil 3: Bestimmungen für einzelne Werkstoffe
Blatt 1: Anforderungen für Tafelpreßspan, Typen B.0.1, B.2.1, B.2.3, B.3.1, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 und B.7.1
(IEC 641-3-1 : 1992)

This European Standard was approved by CENELEC on 1994-03-08. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 641-3-1 : 1992 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60641-3-1 on 8 March 1994.

The following dates were fixed:

- latest date of publication
of an identical national
standard (dop) 1995-03-15
- latest date of withdrawal
of conflicting national
standards (dow) 1995-03-15

For products which have complied with the relevant national standard before 1995-03-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-03-15.

Annexes designated 'normative' are part of the body of the standard. In this standard, annex ZA is normative.

CONTENTS

	Page
INTRODUCTION	4
Clause	
1 Scope	5
2 Normative references	5
3 Designation	6
4 Requirements	6
Tables	7
Annex ZA (normative) Other international publications quoted in this standard with the references of the relevant European publications.....	29

INTRODUCTION

This International Standard is one of a series which deals with solid pressboard and presspaper, dyed or natural coloured, having a calendered or non-calendered or precompressed finish and supplied in an unimpregnated condition.

The series consists of three parts:

Part 1: Definitions and general requirements (IEC 641-1).

Part 2: Methods of test (IEC 641-2).

Part 3: Specifications for individual materials (IEC 641-3).

This standard contains one of the sheets comprising Part 3, as follows:

Sheet 1: Requirements for pressboard, types B.0.1, B.2.1, B.2.3, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 and B.7.1.

SPECIFICATION FOR PRESSBOARD AND PRESSPAPER FOR ELECTRICAL PURPOSES

Part 3: Specifications for individual materials

Sheet 1: Requirements for pressboard, types B.0.1, B.2.1, B.2.3, B.3.1, B.3.3, B.4.1, B.4.3, B.5.1, B.6.1 and B.7.1

1 Scope

This International Standard gives the requirements for pressboard for electrical purposes comprised of 100 % sulphate wood pulp or a mixture of sulphate wood pulp and cotton.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 641-1: 1979, *Specification for pressboard and presspaper for electrical purposes – Part 1: Definitions and general requirements.*

IEC 641-2: 1979, *Specification for pressboard and presspaper for electrical purposes – Part 2: Methods of test.*

3 Designation (according to IEC 641-1)

Type	Composition	Description	Table
B.0.1	100 % sulphate wood pulp	Calendered pressboard of particularly high chemical purity	1
B.2.1 B.2.3	100 % sulphate wood pulp Mixture of sulphate wood pulp and cotton	Calendered pressboard characterized by high chemical purity	2
B.3.1 B.3.3	100 % sulphate wood pulp Mixture of sulphate wood pulp and cotton	Precompressed pressboard, a very hard and rigid board, characterized by high purity and mechanical strength. Its surface bears a cloth mark.	3
B.4.1 B.4.3	100 % sulphate wood pulp Mixture of sulphate wood pulp and cotton	Soft calendered pressboard characterized by high purity and high oil absorption and capable of being shaped	4
B.5.1	100 % sulphate wood pulp	Mouldable pressboard of high purity and high oil absorption and capable of being shaped	5
B.6.1	100 % sulphate wood pulp	Hard calendered pressboard of low porosity, usually sized	6
B.7.1	100 % sulphate wood pulp	Hard calendered pressboard of low porosity, usually loaded	7
NOTE - Qualities with specially high densities are designed in column B of B.0.1 (table 1) and B.2.1 (table 2).			

4 Requirements

The material shall conform to the general requirements as given in IEC 641-1 and to the specific requirements of the appropriate type given in tables 1 to 7 of this sheet.

Table 1 – Requirements for calendered pressboard (basic type B.0)

Property	IEC 641-2 Clause or subclause	Units	Min./Max. or range	Type
				B.0 Calendered pressboard of particularly high chemical purity
				B.0.1 100 % sulphate wood- pulp
Thickness Deviation from nominal of all eight measurements ≤ 1,6 mm > 1,6 - 8,0 mm	2	%	Max.	± 7,5 ± 5,0
Apparent density ≤ 1,6 mm > 1,6 - 3,0 mm > 3,0 - 6,0 mm > 6,0 - 8,0 mm	3	g/cm ³	Range	A 1,0-1,2 1,0-1,2 1,0-1,2 1,0-1,2 B 1,2-1,3 1,2-1,3 1,2-1,3 1,2-1,3
Tensile strength Machine direction ≤ 1,6 mm > 1,6 - 3,0 mm > 3,0 - 6,0 mm > 6,0 - 8,0 mm	4.1	MPa	Min.	A 80 80 80 - B 110 120 100 -
Tensile strength Cross machine direction ≤ 1,6 mm > 1,6 - 3,0 mm > 3,0 - 6,0 mm > 6,0 - 8,0 mm	4.1	MPa	Min.	A 55 55 55 - B 85 90 80 -