65 to 85 g/m² paper for use in optical character recognition systems – Requirements and testing

<u>DIN</u> 6724-2

Part 2: Coated, treated, carbonless copy paper

ICS 35.260.20

Supersedes February 1995 edition.

Descriptors: Paper, optical character recognition systems.

Papiere für die Datenverarbeitung – 65- bis 85-g/m²-Papier für Belegsortierleser – Teil 2: Gestrichen, beschichtet, durchschreibend – Anforderungen, Prüfung

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Foreword

This standard has been prepared by Technical Committee *Datenverarbeitungs- und Büropapiere* of the *Normenausschuß Papier und Pappe* (Paper and Board Standards Committee).

This standard covers paper that will have machine-readable alphanumeric characters printed upon it (i.e. for use in optical character recognition (OCR) systems). Such paper is used for document exchange (e.g. automatic payment transactions).

The paper covered by this standard is suitable for medium to slow processing, depending on the grammage. Paper intended for high-speed processing (e.g. in high-speed coders, sorter/readers or scanners) is dealt with in DIN 6723-1 and DIN 6723-2.

The requirements specified here for the mechanical properties of the paper take into account both the manual and automatic handling of documents, especially as regards the extreme loading to which the paper is subjected when copies are separated from originals and when documents are automatically collated or fed through the reading/sorting machine or scanner. This loading is a result of the multiple times and the speed with which documents are fed through the machine or scanner (e.g. when sorting).

Experience has shown that paper with a grammage less than 90 g/m² – or paper with this grammage but which does not meet the requirements of this standard – is not suitable for high-speed processing (e.g. in high-speed coders/coding machines, sorter/readers or scanners).

The static and dynamic coefficients of friction may vary considerably, due to the additional pressure-sensitive coating of carbonless paper. Paper with coefficients near the upper limit normally specified (0,7) have been shown to present problems in slower processing machines, primarily when copies are separated by means of friction. For this reason, this standard specifies an upper limit of 0,6.

Since document processing machines often contain an endorsing unit or stamping device, that the reverse side (verso) of papers used in such machines should be suitable for stamping and printing.

Abrasion resistance requirements have not been specified here as there are no suitable methods available for testing the resistance of coated paper.

Amendments

The following amendments have been made to the February 1995 edition:

- a) The status of the standard is now that of a full standard.
- b) Requirements for the tensile index are now included.
- c) The standard has been editorially revised.

Previous edition

DIN V 6724-2: 1995-02.

Continued on pages 2 to 5.

Translation by DIN-Sprachendienst

In case of doubt, the German-language original should be consulted as the authoritative text.

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DIÑ 6724-2: 1997-07

1 Scope and field of application

This standard specifies requirements and methods of test for carbonless copy paper with a grammage of 65 to 85 g/m² and intended for use in state-of-the-art optical character recognition (OCR) systems (e.g. paper to be processed in sorting/reading machines or scanners).

The requirements for mechanical properties specified here ensure that the paper will withstand any loading to which it is subjected. Care should be taken that any changes to these properties (e.g. as a result of printing processes or document handling) do not adversely affect the performance of the paper.

2 Normative references

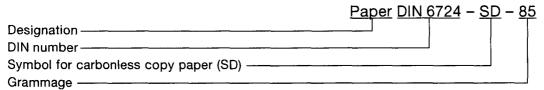
This standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate place in the text and the titles of the publications are listed below. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated into it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

DIN 6721-2	40 to 90 g/m² paper for continuous forms used for data processing – Carbonless copy paper – Requirements and testing
DIN 53107	Determination of smoothness of paper and board by the Bekk method
DIN 53119-1	Determination of the friction resistance of paper - Method of recording data
DIN 53121	Determination of the bending stiffness of paper and board by the beam methods
DIN 53126	Determining the suitability for writing of paper
DIN 53145-1	Determination of the reflectance factor of non-fluorescent paper
DIN 53145-2	Determination of the reflectance factor of fluorescent paper
DIN 53146	Determination of opacity of paper
DIN 66223-1	Fonts for optical character recognition, paper and print quality – Requirements and testing
DIN EN 20187	Standard atmosphere for conditioning and testing of paper, board and pulps and procedure for monitoring the atmosphere and conditioning of samples (ISO 187: 1990)
DIN EN ISO 186	Sampling of paper and board to determine average quality (ISO 186: 1994)
DIN EN ISO 536	Determination of grammage of paper and board (ISO 536 : 1995)
DIN EN ISO 1924-2	Determination of tensile properties of paper and board - Constant rate of elongation method (ISO 1924-2: 1995)

3 Designation and concepts

3.1 Designation

Designation of paper in accordance with this standard, which is intended for use in OCR systems and has a grammage of 65 to 85 g/m^2 :



(e.g. 85 = 85 g/m²; given in multiples of five beginning with 65)

NOTE: Any grammage other than those in multiples of five from 65 to 85 are subject to agreement.

3.2 Concepts

3.2.1 Carbonless copy paper

Paper coated on one or both sides so that it transfers writing when pressure is put on it without the use of carbon paper or carbonized paper. Designated in this standard as 'SD paper'.

3.2.1.1 'Coated back' paper

For the purposes of this standard, carbonless copy paper which is coated on the reverse side and which is used as the top sheet in multiple forms. Designated in this standard as 'CB paper'.

3.2.1.2 'Coated front' paper

For the purposes of this standard, carbonless copy paper which is coated on the front side and which is used as the bottom sheet in multiple forms. Designated in this standard as 'CF paper'.