



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 12281:2002

ICS 85.080

National Standards
Authority of Ireland
Dublin 9
Ireland

Tel: (01) 807 3800
Tel. (01) 807 3838

**PRINTING AND BUSINESS PAPER -
REQUIREMENTS FOR COPY PAPER FOR
DRY TONER IMAGING PROCESSES**

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland
and comes into effect on.
November 6, 2002*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2002

Price Code G

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 12281

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2002

ICS 85.080

Supersedes ENV 12281:1996

English version

Printing and business paper - Requirements for copy paper for dry toner imaging processes

Papier - Papier d'impression et de bureau - Spécifications
pour papier pour photocopie pour procédés de reproduction
par toner sec

Druck- und Büropapier - Anforderungen an Kopierpapier für
Vervielfältigungen mit Trockentoner

This European Standard was approved by CEN on 17 August 2002.

CEN 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 Management Centre or to any CEN 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 CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN 12281:2002 (E)**Contents**

	page
Foreword	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Sampling	6
5 Conditioning	6
6 Requirements	6
7 Migratory substances and contamination	7
8 Packaging	7
8.1 General	7
8.2 Absence of contamination	7
9 Test report	8
Annex A (normative) Runnability	9
A.1 Basis of the procedure	9
A.2 Preparation of copier machine	9
A.3 Test master	9
A.4 Runnability test conditions	9
A.4.1 Conditions of test	9
A.5 Jamming	10
A.6 Test report	12
Annex B (normative) CEN Test Master	13
Annex C (normative) Determination of cutting quality	14
C.1 General	14
C.2 Definition	14
C.3 Principle	14
C.4 Tools	14
C.4.1 Apparatus	14
C.4.2 Cutting Quality Template	14
C.5 Preparation of test pieces	15
C.6 Procedure	15
C.7 Calculation	15
C.8 Requirements	16
C.9 Test report	16
Bibliography	18

Foreword

This document (EN 12281:2002) has been prepared by Technical Committee CEN /TC 172 "Pulp, paper and board", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

This document supersedes ENV 12281:1996.

With regard to ENV 12281:1996 the following changes have been made:

- a) deletion of clause 4 "Principle";
- b) table 1 "Requirements for copy paper" includes now more precise data;
- c) procedure for the "determination of cutting quality" was exchanged and replaced by practical procedure;
- d) transformation from a European Prestandard (ENV) in a European Standard (EN) is intended;
- e) editorial updating.

Annexes A, B and C are normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

EN 12281:2002 (E)**Introduction**

Paper for use in dry toner imaging processes, the common copy paper, represents one of the major grades of the world's paper market. Most copier machines, laser-printers and similar machines work with dry toner imaging. For simplification only the terms "copy paper" and "copier machine" are used.

It is not possible to define performance of a copy paper by physical properties alone. Therefore, CEN/TC 172 has put aside several technical paper characteristics and focused on defining and specifying the equivalents of "printability" and "runnability", as well as those paper properties that appeal directly to the end-user.

Since a standard copier machine does not exist and customer demands on some accommodating and aesthetic aspects will vary, several characteristics were not given a required value. In such cases, though, test methods are provided that will facilitate the making of adequate agreements between supplier and customer.

1 Scope

This European Standard specifies the performance requirements for uncoated cut-size paper for dry toner imaging processes (i.e. copy paper), in 80 g/m² and in A4 format based on EN ISO 216. Other grammages and sizes of the ISO-A series are covered by this European Standard, as long as the requirements specified in this European Standard are fulfilled.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 12283:2002, *Printing and business paper — Determination of toner adhesion*.

EN ISO 186, *Paper and board — Sampling to determine average quality (ISO 186: 2002)*.

EN ISO 216, *Writing paper and certain classes of printed matter — Trimmed sizes — A and B series (ISO 216:1975)*.

EN ISO 536, *Paper and board — Determination of grammage (ISO 536:1995)*.

EN 20187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples (ISO 187:1990)*.

EN 20287, *Paper and board — Determination of moisture content — Oven drying method (ISO 287:1985)*.

EN 20534, *Paper and board — Determination of thickness and apparent bulk density or apparent sheet density (ISO 534:1988)*.

ISO 2471, *Paper and board — Determination of opacity (paper backing) — Diffuse reflectance method*.

ISO 11475, *Paper and board — Determination of CIE whiteness, D 65/10 degrees (outdoor daylight)*.

ISO 14968:1999, *Paper and board — Cut-size office paper — Measurement of curl in a pack of sheets*.

ISO 15359:1999, *Paper and board - Determination of the static and kinetic coefficients of friction - Horizontal plane method*.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-