BS EN 1163 : 1997

上海市技术监督情报研究系 登记号 GB 980068

CONTROLLED

ORIGINAL

Feather and down —
Test methods —
Determination of the oil and fat content



The European Standard EN 1163: 1996 has the status of a British Standard

ICS 59,040

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee TCI/67, Household textiles, upon which the following bodies were represented:

British Apparel and Textile Confederation
British Fire Services' Association
British Furniture Manufacturers' Federation
British Interior Textiles Association
British Retail Consortium
Child Accident Prevention Trust
Confederation of British Wool Textiles Limited
Consumer Policy Committee of BSI
Fabric Care Research Association Ltd.
Institute of Trading Standards Administration
National Children's Wear Association
Natural Fillings Producers' Association
North East Lancashire Textile Manufacturers' Association
Qualitas Furnishing Standards Ltd.
Textile Finishers' Association

This British Standard, having been prepared under the direction of the Sector Board for Materials and Chemicals, was published under the authority of the Standards Board and comes into effect on 15 April 1997

© BSI 1997

The following BSI references relate to the work on this standard:
Committee reference TCV67
Draft for comment 93312453 DC

ISRN	Λ	KKIN	27009	9

Amd. No.	Date	Text affected	

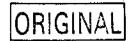
Contents

ORIGINAL

		Pag
Committees responsible	COLUMN	Inside front cove
National foreword	LUNIAULLEDI	
Foreword		
Text of EN 1163		

计划型中央等中的数据和数据的代表图示为1000

National foreword



This British Standard has been prepared by Technical Committee AC For and is the English language version of EN 1163: 1996 Feather and politic H. Test methods — Determination of the oil and fat content published by the European Committee for Standardization (CEN).

Cross-references

Publication referred to	Corresponding British Standard
EN 21039 : 1992	BS EN 20139 : 1992 Textiles. Standard atmospheres for conditioning and testing
EN 20187 : 1993	BS EN 20187: 1993 Paper, board and pulps. Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples
ISO 3819 : 1985	BS 6523: 1984 Specification for glass beakers for laboratory use
ISO 4793 : 1980	BS 1752: 1983 Specification for laboratory sintered or fritted filters including porosity grading
ISO 4797 : 1981	BS 6352: 1983 Specification for flasks with ground glass joints

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, the EN title page, pages 2 to 4, an inside back cover and a back cover.

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1163

August 1996



ICS 67.120.20; 97.160

CONTROLLED

Descriptors: Stuffings, feathers, tests, extraction, oils, greases, soluble matter, solvents, dichloromethance

English version

Feather and down — Test methods — Determination of the oil and fat content

Plumes et duvets — Méthodes d'essai — Détermination du contenu en huiles et graisses Federn und Daunen — Prüfverfahren — Bestimmung des Öl- und Fettgehaltes

This European Standard was approved by CEN on 1996-05-09. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

ORIGINAL

Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 222, Feather and down as filling material for any article, as well as finished articles filled with feather and down, the Secretariat of which is held by UNI.

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 February 1997, and conflicting national standards shall be withdrawn at the latest by February 1997.

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

Contents

CONTROLLED

		Page
0	Introduction	3
1	Scope	3
2	Normative references	3
3	Principle	3
4	Reagents	3
5	Apparatus	3
6	Conditioning and testing	3
7	Procedure	3
8	Expression of results	4
9	Test report	4





0 Introduction

Feather and down can contain varying quantities of oils and fats. It is suspected that adding mineral oil has the effect of binding impurities into the feathers and down, giving the impression of a cleaner product.

1 Scope

This European Standard specifies a method for determining the amount of solvent soluble matter in dichloromethane.

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.

EN 20139	Textiles — Standard atmospheres for conditioning and testing (ISO 139: 1973)
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)
ISO 3074	Wool — Determination of dichloromethane-soluble matter in combed sliver
ISO 3819	Laboratory glassware — Beakers
ISO 4793	Laboratory sintered (fritted) filters — Porosity grading, classification and designation
ISO 4797	Laboratory glassware — Flasks with conical ground joints
ISO 4797-1	Laboratory apparatus — Vocabulary relating to apparatus made essentially from glass, porcelain or vitreous silica — Part 1: Names for items of apparatus

3 Principle

Extraction of a known amount of feathers and down in a Soxhlet apparatus with dichloromethane; filtration of the dichloromethane solution, evaporation of the solvent and determination of the mass of the residue.

4 Reagents

Purified, distilled dichloromethane (in accordance with ISO 3074).

5 Apparatus

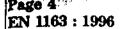
- 5.1 Analytical balance, (with sensitivity of 0,1 mg).
- 5.2 Soxhlet extractor, capacity 100 ml with condenser (in accordance with ISO 4797-1).
- **5.3** Extractor flasks, capacity 250 ml (in accordance with ISO 4797).
- 5.4 Fat free paper thimbles, or sintered base glass.
- 5.5 Condenser.
- **5.6** Sintered (fritted) filter, P 100 (ISO 4793) or fat free paper filter of equal porosity.
- 5.7 Waterbath, or hot plate.
- 5.8 Desiccator, with desiccating agent.
- 5.9 Tared glass beaker, capacity 100 ml, dried at (105 ± 2) °C (in accordance with ISO 3819).
- 5.10 Drying oven, capable of being controlled at a temperature of (105 ± 2) °C.

6 Conditioning and testing

Test specimens of a representative part of the laboratory bulk sample shall be conditioned for a minimum period of 24 h in accordance with EN 20139 and the temperature and relative humidity shall be measured in accordance with EN 20187.

7 Procedure

- 7.1 Take one conditioned test specimen of mass from $4 g \pm 0.05 g$ to $5 g \pm 0.05 g$.
- 7.2 Put the conditioned test specimen into the extraction thimble, which is placed in the Soxhlet extractor. Attach the condenser and extraction flask, and put enough solvent to maintain siphoning. Place the connected flask in the waterbath or on the hot plate so that satisfactory siphoning occurs, at the rate of not less than 6 cycles per hour and then extract the individual sample.
- 7.3 Extract the test specimen for not less than 20 siphonings. Filter the content of the extraction flask through a sintered filter or fat free paper filter into a tared beaker, remove the bulk of the solvent by distillation, dry to constant mass in a well ventilated oven at (105 ± 2) °C.
- 7.4 Repeat the operations in 7.1 to 7.3 on the second test specimen.







8 Expression of results

The dichloromethane-soluble matter (in percent) is calculated as follows:

$$M_{\rm s} = \frac{A - B}{C} \times 100$$

where:

 $M_{\rm S}$ is the percentage of matter soluble in dichloromethane;

A is the mass of the beaker containing the residue, in grams;

B is the mass of the beaker, in grams;

 ${\cal C}_{}$ is the mass of the conditioned test specimen, in grams.

.he result is expressed as the average of at least two determinations, rounded to one decimal place.

9 Test report

The test report shall include at least the following information:

- the reference to this standard;
- date and place of testing;
- identification mark of the individual sample tested;
- the mean result to one decimal place in accordance with 8;
- any departure from the procedure and any other circumstances that can have affected the result.



BSI — British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

Contract requirements

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.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the responsible technical committee, the identity of which can be found on the inside front cover. Tel: 0181 996 9000; Fax: 0181 996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services, Sales Department at Chiswick: Tel: 0181 996 7000; Fax: 0181 996 7001.

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Library, the Standardline Database, the BSI Information Technology Service (BITS) and its Technical Help to Exporters Service. Contact the Information Department at Chiswick: Tel: 0181 996 7111; Fax: 0181 996 7048.

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Customer Services, Membership at Chiswick: Tel: 0181 996 7002; Fax: 0181 996 7001.

Copyright

Copyright subsists in all BSI publications. BSI also holds the copyright, in the UK, of the publications of the international standardization bodies. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI.

This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any other purpose than implementation then the prior written permission of BSI must be obtained.

If permission is granted, the terms may include royalty payments or a licensing agreement. Details and advice can be obtained from the Copyright Manager, BSI, 389 Chiswick High Road, London W4 4AL.

BSI 389 Chiswick High Road London W4 4AL