COMMISSION OF THE EUROPEAN COMMUNITIES

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PROPOSAL FOR A COUNCIL DIRECTIVE
AMENDING ANNEX II (2) TO DIRECTIVE 72/276/EEC
ON THE APPROXIMATION OF THE LAWS OF THE
MEMBER STATES RELATING TO CERTAIN METHODS
FOR THE QUANTITATIVE ANALYSIS OF BINARY
TEXTILE FIBRE MIXTURES

(presented by the Commission to the Council)

PROPOSAL FOR A COUNCIL DIRECTIVE AMENDING ANNEX II, 2 TO DIRECTIVE 72/276/EEC ON THE APPROXIMATION OF THE LAWS OF THE MEMBER STATES RELATING TO CERTAIN METHODS FOR THE QUANTITATIVE ANALYSIS OF BINARY TEXTILE FIBRE MIXTURES

EXPLANATORY MEMORANDUM

In order to remove technical barriers to trade and provide consumers with essential information on textiles, Council Directive 71/307/EEC of 26 July 1971 makes provision for the mandatory labelling of the quantitative and qualitative fibre composition of textile products.

As compliance with this general obligation is monitored by means of analysis, it is essential that the methods of analysing the various mixtures on the market be harmonized; that is why Article 13 of the abovementioned Directive specifies that : "Separate directives will specify the sampling and analysing methods to be used in all Member States to determine the fibre composition of products covered by this Directive".

Consequently an initial Council Directive (72/276/EEC) was adopted on 17 July 1972 and contains in an Annex harmonized methods of analysis for 13 binary mixtures corresponding to some of the most widespread textile products on the market.

The list of methods laid down in the abovementioned Directive is not, however, exhaustive and must gradually be supplemented by harmonized methods of analysis for other textile products consisting of binary mixtures that are on the market.

This Directive is therefore a first addition to Directive 72/276/EEC. Its Annex contains methods of analysis for two important products that have recently appeared on the market : products composed of binary mixtures containing polypropylene fibrs and containing chlorofibres.

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These methods, numbered 14 and 15, have been prepared by the Commission's Technical Working Party on textile names and labelling (analysis) on the basis of ISO methods Nos 15 and 16 (International Standard ISO 1833, 1977, Second Edition) after numerous interlaboratory tests.

An early date is envisaged for the entry into force of the provisions of national law necessary for the implementation of this Directive: indeed, these measures concern only a limited number of national laboratories.

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,
Having regard to the proposal from the Commission,
Having regard to the opinion of the European Parliament,
Having regard to the opinion of the Economic and Social Committee,
Whereas Council Directive 71/307/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to textile names (1) lays down provisions on the mandatory labelling of the fibre composition of textile products;

Whereas, pursuant to Article 13 of the above mentioned Directive 71/307/EEC, Council Directive 72/276/EEC of 17 July 1972 on the approximation of the laws of the Member States relating to certain methods for the quantitative analysis of binary textile fibre mixtures (2) lays down thirteen uniform methods of analysis for most of the textile products composed of binary mixtures that are on the market;

Whereas textile products consisting of polypropylene fibres and certain other fibres and products consisting of chlorofibres based on homopolymers of vinyl chloride and certain other fibres which are also subject to the labelling obligation provided for in Directive 71/307/EEC, are not covered by the above mentioned Directive 72/276/EEC, and consequently uniform methods of analysis applicable to these products should be established;

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(1) OJ No L 185, 16.8.1971, p. 16
(2) OJ No L 173, 31.7.1972, p.1

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HAS ADOPTED THIS DIRECTIVE:

Article 1

Special methods Nos 14 and 15 set out in the Annex to this Directive are hereby added to Annex II(2) of Council Directive 72/276/EEC.

Article 2

1. Member States shall bring into force the provisions necessary to comply with this Directive within one year of its notification. They shall forthwith inform the Commission thereof.

2. As soon as this Directive has been notified, Member States shall also ensure that the Commission is informed, in sufficient time for it to submit its comments, of any draft laws, regulations or administrative provisions which they intend to adopt in the field covered by this Directive.

Article 3

This Directive is addressed to the Member States.

ANNEX

METHODS FOR QUANTITATIVE ANALYSIS OF CERTAIN BINARY FIBRE MIXTURES

METHOD No. 14

POLYPROPYLENE FIBRES AND CERTAIN OTHER FIBRES

(Xylene method)

1. FIELD OF APPLICATION

This method is applicable, after removal of non-fibrous matter, to binary mixtures of

1. polypropylene fibres (31)

with

2. wool (1) animal hair (2 and 3) silk (4), cotton (5), acetate (17), cupro (19), modal (20), triacetate (22), viscose (23), acrylic (24), nylon (28), polyester (29), and glass fibres (38).

2. PRINCIPLE

The polypropylene fibre is dissolved from a known dry mass of the mixture with boiling xylene. The residue is collected, washed, dried and weighed; its mass, corrected if necessary, is expressed as a percentage of the dry mass of the mixture. The percentage of polypropylene is found by difference.

3. APPARATUS AND REAGENTS (other than those specified in the general instructions)

3.1. Apparatus

i) Conical flasks, of minimum capacity 200 ml, glass stoppered.

ii) Reflux condenser (suitable for liquids of high boiling point), fitting the conical flasks i).

3.2. Reagent

Xylene distilling between 137 and 141°C.

Note. This reagent is highly flammable and has a toxic vapour, suitable precautions must be taken in its use.

4. TEST PROCEDURE

Apply the method described in the general instructions, then proceed as follows :

To the specimen contained in the conical flask (3.1.i), add 100 ml of xylene (3.2) per gram of specimen. Attach the condenser (3.1.ii) and bring the contents to the boil and maintain at boiling point for three minutes. Immediately decant the liquid through the weighed filter crucible (see note 1). Repeat this treatment twice more, each time using a fresh 50 ml portion of solvent.

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Wash the residue remaining in the flask successively with 30 ml of boiling xylene (twice), then with 75 ml of light petroleum (I.3.2.1) of the general part) (twice). After the second wash with light petroleum, filter the contents of the flask through the crucible, transfer any residual fibres to the crucible with the aid of a small quantity of light petroleum and allow the solvent to evaporate. Dry the crucible and residue, cool and weigh them.

NOTES

1. The filter crucible through which the xylene is to be decanted must be preheated.
2. After the treatment with boiling xylene, ensure that the flask containing the residue is cooled sufficiently before the light petroleum is introduced.
3. In order to reduce the fire and toxic hazards to the operator a hot extraction apparatus using the appropriate procedures, giving identical results, may be used; see, for example, the apparatus described in Melliand Textilberichte 56 (1975), pp 643-645.

5. CALCULATION AND EXPRESSION OF RESULTS

Calculate the results as described in the general instructions. The value of d is 1.00.

6. PRECISION

For homogeneous mixtures of textile materials, the confidence limits of results obtained by this method are not greater than $\pm$ 1 for the confidence level of 95%.

METHOD N° 15

CHLOROFIBRES (HOMOPOLYMERS OF VINYL CHLORIDE) AND CERTAIN OTHER FIBRES

(Concentrated sulphuric acid method)

1. FIELD OF APPLICATION

This method is applicable, after removal of non-fibrous matter, to binary mixtures of

1. chlorofibres (25) based on homopolymers of vinyl chloride (after-chlorinated or not)

with

2. cotton (5), acetate (17), cupro (19), modal (20), triacetate (22), viscose (23), certain acrylic (24), certain modacrylic fibres (27), nylon (28) and polyester (29). The modacrylics concerned are those which give a limpid solution when immersed in concentrated sulphuric acid (relative density 1.84 at 20°C).

This method can be used in place of Methods 8 or 9.

2. PRINCIPLE

The constituent other than the chlorofibre (i.e. the fibres mentioned under point 2 of § 1) is dissolved from a known dry mass of the mixture with concentrated sulphuric acid ($\rho 20 = 1.84$ g/ml). The residue, consisting of the chlorofibre, is collected, washed, dried and weighed; its mass, corrected if necessary, is expressed as a percentage of the dry mass of the mixture. The percentage of the second constituent is obtained by difference.

3. APPARATUS AND REAGENTS (other than those specified in the general instructions)

3.1. Apparatus

i) Conical flask, of minimum capacity 200 ml, glass stoppered.

ii) Glass rod with flattened end.

3.2. Reagents

i) Sulphuric acid, concentrated (ρ 20 = 1.84 g/ml)

ii) Sulphuric acid, 50% (m/m) approximately.

Prepare by adding carefully, while cooling, 400 ml of sulphuric acid ($\rho 20 = 1.84$ g/ml) to 500 ml of distilled or deionised water. After cooling to room temperature, dilute the solution to 1 litre with water.

iii) Ammonia, dilute solution.

Dilute 60 ml of concentrated ammonia solution ($\rho 20 = 0.880$ g/ml) to 1 litre with distilled water.

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4. TEST PROCEDURE

Follow the procedure specified in the general instructions, then proceed as follows :

To the specimen contained in the flask (3.1.i) add 100 ml of sulphuric acid (3.2.i) per gram of specimen.

Allow the contents of the flask to remain at room temperature for 10 min , and during that time stir the test specimen occasionally by means of the glass rod. If a woven or knitted fabric is being treated, wedge it between the wall of the flask and the glass rod and exert a light pressure in order to separate the material dissolved by the sulphuric acid.

Decant the liquid through the weighed filter crucible. Add to the flask a fresh portion of 100 ml of sulphuric acid (3.2.i) and repeat the same operation. Transfer the contents of the flask to the filter crucible and transfer the fibrous residue there with the aid of the glass rod. If necessary, add a little concentrated sulphuric acid (3.2.i) to the flask in order to remove any fibres adhering to the wall. Drain the filter crucible with suction; remove the filtrate by emptying or changing the filter-flask, wash the residue in the crucible successively with 50% sulphuric acid solution (3.2.ii), distilled or deionized water (I-3-2-3 of the general part), ammonia solution (3.2.iii) and finally wash thoroughly with distilled or deionized water, draining the crucible with suction after each addition. (Do not apply suction during the washing operation, but only after the liquid has drained off by gravity.)

Dry the crucible and residue, cool and weigh them.

5. CALCULATION AND EXPRESSION OF RESULTS

Calculate the results as described in the general instructions. The value of d is 1.00.

6. PRECISION

For homogeneous mixtures of textile materials, the confidence limits of results obtained by this method are not greater than $\pm$ 1 for the confidence level of 95%.