ANNEX VIII

Methods for the quantitative analysis of binary and ternary textile fibre mixtures
(referred to in Article 19(1))

CHAPTER 2
METHODS FOR QUANTITATIVE ANALYSIS OF CERTAIN BINARY TEXTILE FIBRE MIXTURES

IV. **Special methods**

METHOD No 7**[**[F1]**CERTAIN CELLULOSE FIBRES AND CERTAIN OTHER FIBRES**(Method using 75 % m/m sulphuric acid)**]**

1. FIELD OF APPLICATION

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

1. cotton (5), flax (or linen) (7), true hemp (8), ramie (14), cupro (21), modal (22), viscose (25)

   with

2. **[**[F1]polyester (35), polypropylene (37), elastomultiester (45), elastolefin (46) and polypropylene/polyamide bicomponent (49).**]**

2. PRINCIPLE

The cellulose fibre is dissolved out from a known dry mass of the mixture, with 75 % m/m sulphuric acid. The residue is collected, washed, dried and weighed; its mass is expressed as a percentage of the dry mass of the mixture. The proportion of dry cellulose fibre is found by difference.

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

3.1. Apparatus

(a) Glass-stoppered conical flask of at least 500 ml capacity.

(b) Thermostat or other apparatus for maintaining the flask at 50 ± 5 °C.

3.2. Reagents

(a) Sulphuric acid, 75 ± 2 % m/m

Prepare by adding carefully, while cooling, 700 ml of sulphuric acid (relative density at 20 °C: 1,84) to 350 ml of distilled water.

After the solution has cooled to room temperature, dilute to 1 litre with water.

(b) Ammonia, dilute solution

Dilute 80 ml of ammonia solution (relative density at 20 °C: 0,880) to 1 litre with water.

4. TEST PROCEDURE

Follow the procedure described in the general instructions and proceed as follows:

To the specimen contained in the glass-stoppered conical flask of at least 500 ml capacity, add 200 ml of 75 % sulphuric acid per gram of specimen, insert the stopper and carefully shake the flask to wet out the specimen.

Maintain the flask at 50 ± 5 °C for 1 hour, shaking it at regular intervals of approximately 10 minutes. Filter the contents of the flask through the weighed filter crucible by means of suction. Transfer any residual fibres by washing out the flask with a little 75 % sulphuric acid. Drain the crucible with suction and wash the residue on the filter once by filling the crucible with a fresh portion of sulphuric acid. Do not apply suction until the acid has drained under gravity.

Wash the residue successively several times with cold water, twice with dilute ammonia solution, and then thoroughly with cold water, draining the crucible with suction after each addition. Do not apply suction until each washing liquor has drained under gravity. Finally, drain the remaining liquid from the crucible with suction, dry the crucible and residue, and cool and weigh them.

[[F1]5. CALCULATION AND EXPRESSION OF RESULTS

Calculate the results as described in the general instructions. The value of ‘d’ is 1,00, except for polypropylene/polyamide bicomponent, for which the value of ‘d’ is 1,01.**]**

6. PRECISION

On a homogeneous mixture of textile materials, the confidence limits of results obtained by this method are not greater than ± 1 for a confidence level of 95 %.

Status:
Point in time view as at 31/01/2020.

Changes to legislation:
There are outstanding changes not yet made to Regulation (EU) No 1007/2011 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.