



---

SCIENTIFIC SUB-COMMITTEE	41.676 E
-	
13th Session	O. Eng
-	
	SC-3

Brussels, 24 November 1997.

TEST METHODS FOR "RIGID" AND "FLEXIBLE" POLYMERS  
AND COPOLYMERS VINYL CHLORIDE

(Item II.15 on Agenda)

Reference documents :

40.040 (RSC/13)  
40.180 Annex C/16 (RSC/13 - Report)  
40.213 (SSC/11)  
40.369 (SSC/11)  
40.460 Annex A/11 (SSC/11 - Report)  
40.256 (RSC/14)  
40.600 Annex D (HSC/18 - Report)  
40.805 (SSC/12)  
40.870 Annex A/18 (SSC/12 - Report)  
40.788 (RSC/15)  
40.920 Annex A/2 (RSC/15 - Report)  
40.881 HSC/19  
41.100 Annex E/1 (HSC/19 - Report)  
41.461 (RSC/16)  
41.557 (RSC/16)  
41.580 Annex A/17 (RSC/16 - Report)

I. BACKGROUND

1. At its 16th Session (September 1997), the Review Sub-Committee re-examined the EC proposal for amendment to the texts of subheadings 3920.41 and 3920.42 by replacing the expressions "rigid" and "flexible" by the expressions "non-plasticised" and "plasticised", respectively. Since the Scientific Sub-Committee had found it difficult to distinguish the products on the basis of a percentage criterion of plasticiser content, the Review Sub-Committee considered other possible approaches. One view was to apply a zero tolerance criterion of plasticisers which would be further studied on the basis of relevant trade data. Another proposal was to lay down the criteria for distinguishing between "rigid" and "flexible" products of subheadings 3920.41 and 3920.42 on the basis of physical test methods. In that context, it was agreed that the test methods suggested by the US Administration

File No. 2585

---

For reasons of economy, documents are printed in limited number. Delegates are kindly asked to bring their copies to meetings and not to request additional copies.

(Doc. 41.461) and the EC (Doc. 40.040) should be referred to the next session of the Scientific Sub-Committee for evaluating their suitability.

## II. SECRETARIAT COMMENTS

2. For ease of reference, relevant parts of Docs. 41.461 and 40.040 are reproduced as follows :

### Test method suggested by the US (Doc. 41.461, paragraph 4)

"In heading 39.20, the expression "rigid" applies to plastics with a modulus of elasticity greater than 700 MPa at 23 °C and 50 % relative humidity measured in flexure or tension".

The US offers the following points in support of its proposal :

- (1) This definition is based on accepted international and national standards (ISO 472, ASTM D 883 and JIS K6900).
- (2) The administration of this definition is not dependent on identification, definition or classification of additives such as plasticisers, stabilisers and flame retardants, which may be found in the products. Alternative proposals based on plasticiser-content require a clear definition of additives which would be considered "plasticisers". PVC products frequently contain other additives such as stabilisers and flame retardants, which could cloud the measurement of plasticiser content.
- (3) This criterion is based on international standards that apply to copolymers and blends as well as to PVC (homopolymer). On the other hand, a plasticiser content test would be difficult to extend to all the materials in the subheading, because polymers other than PVC react differently to plasticisers and other additives.
- (4) When the term "rigid" is defined by a legal note, the residual category should be merely "Other".

### Test method suggested by the EC (Doc. 40.040, paragraph 6)

3. The EC Combined Nomenclature has defined "flexible" products as follows in its Explanatory Notes (O.J. C 342/94 of 5 December 1994, page 190) :

"For the purpose of these subheadings, products which can, without fracturing, be bent manually around a cylinder of a diameter of 18 cm, at a temperature of between 15 and 30 °C, are considered as flexible products."

4. The Secretariat would like to point out that the test proposed by the US is for measuring (on a given scale) the rigidity of a product, i.e., its resistance to bending or flexing. The text proposed by the EC, on the other hand, is a simple indication that a sheet is flexible if it can be wrapped around a cylinder without fracturing. The Secretariat is not certain whether these two tests would be equivalent in their determination of flexibility. That is, a sheet which demonstrates a modulus of elasticity of, say, 700 MPa or less by the US method, thus being

termed "non-rigid", should wrap around a cylinder without fracturing under the EC method and those above 700 Mpa should fracture, if both test methods are identical in the coverage of products.

5. The Sub-Committee is asked to evaluate the suitability of the above two test methods to distinguish between "rigid" and "flexible" products of subheading 3920.4. In this connection, it seems necessary to examine whether these test methods can be applied to all types of products of subheading 3920.4 (e.g., plates, sheets, film, etc.); whether they are simpler than the test methods to distinguish the products based on zero tolerance for plasticisers ( e.g. infra-red spectrophotometry or solvent extraction).

### III. CONCLUSION

6. The Sub-Committee is invited to give its views on the suitability of these test methods proposed by the US Administration (paragraph 2 above) and the EC (paragraph 3 above) to distinguish between "rigid" and "flexible" products of subheading 3920.4.
7. Depending on its conclusion on the above question, the Sub-Committee is also invited to examine whether :
  - (a) both these methods are equivalent or otherwise in the coverage of products;
  - (b) they can be applied to all types of products of subheading 3920.4;
  - (c) the methods are simpler or more complex compared to the test methods for zero tolerance of plasticisers.

---