



HARMONIZED SYSTEM
COMMITTEE

NC0693E1

-
31st Session

O. Eng.

Brussels, 13 March 2003.

CLASSIFICATION OF CERTAIN MODIFIED STARCHES OR SIZING PREPARATIONS

(Item VIII.7 on Agenda)

Reference documents :

NC0483E1 (HSC/28)
NC0510E2, Annex H/3 (HSC/28 – Report)
NS0058E1 (SSC/17)
NS0060E2, Annex A/14 (SSC/17 – Report)
NC0530E1, paragraphs 34 and 35 (HSC/29)

NC0543E1 (HSC/29)
NC0590E2, Annex H/5 (HSC/29 – Report)
NC0623E1 (HSC/30)
NC0655E2, Annex G/13 (HSC/30 – Report)
NS0080E2, Annex A/14 (SSC/18 – Report)

I. BACKGROUND

1. At its 28th Session, the Harmonized System Committee examined the classification of “CATO-SIZE® 52 A”, “CATO® 15A”, “ETHYLEX® 2040 Gum”, “Astro X-101 Starch”, “Penford® Gum 270” and “STA-LOK® 400”, on the basis of Doc. NC0483E1. During the discussion of the issue, different views were expressed in the Committee regarding the classification of these products. The competing headings were 35.05 and 38.09.
2. One delegate felt that the information provided was not sufficient to decide on the classification of these products and proposed to submit this question to the Scientific Sub-Committee in order to obtain its technical views. The Committee agreed that additional information was needed before it could take an informed decision.
3. The Committee finally agreed to again study this question on the basis of additional information (e.g., whether substances have been added to the modified starches) to be provided by the Colombian Administration and/or the manufacturers. The Committee also agreed to request the Scientific Sub-Committee to provide its technical views on the scope of headings 35.05 and 38.09.
4. Acting on the Committee’s decision, the Secretariat, by its letter of 5 December 2001, requested the Colombian Administration to provide further information, as soon as possible, in order to facilitate the preparation of a working document for the next session (May 2002) of the Harmonized System Committee.

Note : Shaded parts will be removed when documents are placed on the WCO documentation database available to the public.

File No. 2878

5. The Scientific Sub-Committee, at its 17th Session, in January 2002, examined the scope of headings 35.05 and 38.09 within the context of the classification of, and the technical information available on, the six products at issue. The Scientific Sub-Committee agreed that the products fell within the scope of heading 35.05.
6. On 23 April 2002, the Secretariat received a letter from the Colombian Administration containing additional information on the four products "CATO® 15 A", "CATO-SIZE® 52 A", "Penford® Gum 270" and "Astro X-101 Starch" provided by their manufacturers. The Secretariat also received a letter from Smurfit Carton de Colombia S.A., the end user of the products "CATO-SIZE® 52 A" and "CATO® 15 A" in Colombia, dated 27 March 2002. Extracts of the relevant submissions were reproduced in Doc. NC0623E1.
7. At the 29th Session, due to a lack of time, the Committee agreed to postpone discussion of this item to its next session in November 2002. Interested delegates also received an informal presentation on the issues involved from representatives of Smurfit Carton de Colombia S.A.
8. At its 30th Session, the Committee continued to examine the classification of these modified starches or sizing preparations. Several delegates expressed the view that, on the basis of the observations made by the Scientific Sub-Committee at its 17th Session, as well as additional information reproduced in Doc. NC0623E1, the products at issue were modified starches classifiable in heading 35.05.
9. One delegate, however, was of the view that, in the light of additional information that had been received concerning the four products, "CATO® 15 A", "CATO-SIZE® 52 A", "Penford® Gum 270" and "Astro X-101 Starch", the matter should be sent back to the Scientific Sub-Committee.
10. The Committee agreed and decided to address the following questions to the Scientific Sub-Committee :
 - (i) whether the addition of other ingredients has changed the character of the modified starches and turned them into preparations;
 - (ii) what the roles of the added ingredients were and their effect on the use of the products in a particular industry ?
11. Another delegate noted that this classification issue had been raised by the Colombian Administration which was not represented in the Committee and which had still not provided additional information regarding "ETHYLEX® 2040 Gum" and "STALOK® 400". The Secretariat was therefore instructed to again contact this administration in order to obtain the additional information needed, so that the Scientific Sub-Committee could re-examine all six products. The Colombian Administration should also be asked to submit its opinion on the classification of the products at issue, including a justification, to be submitted to the Committee at its next session.
12. Acting on the Committee's decision, the Secretariat, by its letter of 5 December 2002, again requested the Colombian Administration to submit additional information on "ETHYLEX® 2040 Gum" and "STALOK® 400", as soon as possible, in order to facilitate the preparation of a working document for the next session (January 2003) of the Scientific Sub-Committee.

13. At the same time, the Secretariat asked the **Colombian** Administration to provide its formal position regarding classification of the products at issue, including a justification, to enable the Secretariat to publish it in a working document for the next Session of the HS Committee.
14. To date, the Secretariat has not received any formal position regarding the classification of these products from the **Colombian** Administration. On 29 January 2003, the Secretariat received a letter with the results of the chemical analysis of "**ETHYLEX® 2040 Gum**", "**Astro X-101 Starch**" and "**Penford® Gum 270**", carried out by the **Colombian** Customs Laboratory.
15. The results demonstrate that starch contained in the three products examined was not native but modified, i.e., that "**ETHYLEX® 2040 Gum**" and "**Penford® Gum 270**" contained modified corn starch and that "**Astro X-101 Starch**" contained modified potato starch.
16. Within the context of the classification of the products at issue, the Scientific Sub-Committee, at its 18th Session, examined the questions put forward by the HS Committee at its 30th Session. The observations of the Scientific Sub-Committee are set out below.

II. OBSERVATIONS OF THE SCIENTIFIC SUB-COMMITTEE

17. The Sub-Committee reached consensus on the "**ETHYLEX® 2040 Gum**" and "**STALOK® 400**" as being modified starches of heading 35.05. This conclusion was based on the fact that "**ETHYLEX® 2040 Gum**" contained only extremely small amounts of added substances, which did not change the nature of the product, while "**STALOK® 400**" consisted only of modified starch.
18. As for "**Penford® Gum 270**", a number of delegates felt that it was a modified starch of heading 35.05. However, one delegate was of the opinion that it did not appear to go beyond the point of being a modified starch but suggested that it was not possible to express an opinion concerning its classification without an understanding of how the defoamer contained in the product worked. He felt that the information available on this point was not sufficient. Depending on the information on the use of the defoamer, he believed that headings 35.05 and 38.09 were both classification possibilities.
19. There was a divergence of views within the Sub-Committee concerning the classification of "**CATO® 15 A**", "**CATO-SIZE® 52 A**" and "**Astro X-101 Starch**". One delegate noted that "**CATO® 15 A**" contained very small amounts of certain chemicals. Phosphate had been added to be dispersed during the paper production process. It was designed to produce a charge balance which was bound to the paper. When the paper fibre was rolled, it prevented charges being built up on the fibre, thereby enabling the production of a smoother finished paper. In his administration's view, this product was a preparation specifically prepared for the paper making industry and should therefore be classified in heading 38.09.
20. Other delegates disagreed with this conclusion. While small amounts of a defoamer had been added to the product, they did not believe that this gave the product a specific function. In their view, it remained a modified starch of heading 35.05.
21. Turning to the classification of "**CATO-SIZE® 52 A**", one delegate informed the Sub-Committee that the product was added to the paper at the size press while the paper was

formed but still wet. The presence of foam would halt operations at the size press and form an inconsistent size coating. In his administration's view, heading 38.09 would be appropriate for its classification.

22. Other delegates came to a different conclusion. In their view, the defoaming agent in "CATO-SIZE® 52 A" was used to facilitate various stages of paper making. The defoamer did not provide specific properties to the paper. Consequently, "CATO-SIZE® 52 A" was still a modified starch classifiable in heading 35.05.
23. As for "Astro X-101 Starch", one delegate indicated that the adipic acid in the product did not modify the starch but worked on the furnish as an acidifier. In his administration's view, it was classifiable in heading 38.09.
24. Other delegates felt that it was a modified starch of heading 35.05.
25. In response to the Chairperson's request for the delegates to express their views on the HSC's questions as set out in Annex G/13 to Doc. NC0655E2, the majority of delegates stressed that the text of heading 38.09 contained the phrase "not elsewhere specified or included". The question was therefore whether these products could still be considered to be modified starches. They felt that the addition of the very small quantities of other ingredients (than starch) had not changed the character of the modified starches, thereby turning them into preparations. In support of this conclusion, several delegates indicated that the functioning of the starches had not been improved and that, consequently, they were still modified starches.
26. One delegate argued that in looking at a product, the amount of the added ingredients should not be determinative as to whether or not it should be considered to be a preparation. The text of heading 38.09 merely required that the products be "of a kind used in the paper industry". Clearly the two Cato products and "Astro X-101 Starch" were products used in paper making.
27. The Chairperson then asked delegates to comment on the HSC's question concerning the roles of the added ingredients and their effect on the use of the products in a particular industry. In response, one delegate drew the attention of the Sub-Committee to the Explanatory Note to heading 38.09, page 685, which seemed to imply that these preparations contained other ingredients. The small amount of additives did not contribute to paper quality but were merely processing aids. Consequently, they were not, in her administration's view, sizing preparations but starches for general use of heading 35.05. This view was supported by a majority of delegates.
28. Finally, with respect to the individual products, the delegates expressed the following views concerning the roles of the added ingredients :
 - "CATO® 15 A" – the role of the phosphate is described in paragraph 19 above.
 - "CATO-SIZE® 52 A" – the defoamer was added to diminish the amount of foam in the paper-making process.
 - "Astro X-101 Starch" – the adipic acid works on the furnish as an acidifier.
 - "Penford® Gum 270" – the defoamer was added to diminish the amount of foam in the paper-making process.

III. SECRETARIAT COMMENTS

29. On the basis of additional information received and information included in Doc. NC0483E1, for ease of reference, the Secretariat has reproduced below the descriptions of the six products at issue.

“**CATO® 15 A**” is a type of amphoteric (bi-ionic) corn starch based on cationic corn starch with amine functionality to which a determined amount of phosphate was added. According to the chemical analysis forwarded, the product contains, by weight, phosphorus (0.3872 %) and silicon (0.000392 %). Some of the added phosphate is reacted/bounded on the starch to provide an anionic substituent to the cationic modified starch. Some of the added phosphate remains unbound within the resulting product. Both the anionic groups and unbound phosphate provide a specific function to the final product for its use in the papermaking process. The product is of a kind used in acid paper-making processes, where high amounts of alum are added to the wet end of the paper-making machine.

“**CATO-SIZE® 52 A**” is a type of cationic corn starch to which a defoamer was added. According to the chemical analysis forwarded, the product contains 0.185 % by weight of defoamer. The product was designed to be used in the papermaking industry, to be applied at the size press and/or calendar stack, as a surface sizing agent.

“**Penford® Gum 270**” is a corn starch which has been chemically modified with ethylene oxide, salt, soda ash, hydrochloric acid and caustic, containing a defoamer. The product is used as a surface sizing agent in the papermaking industry.

“**Astro X-101 Starch**” is a potato starch which has been chemically modified with quarternary amine, hydrochloric acid, salt, sodium bisulfite and caustic, containing adipic acid. Adipic acid has been added into the product to achieve its optimal performance as an internal sizing agent in the manufacture of paper.

“**ETHYLEX® 2040 Gum**” is a corn starch which has been chemically modified with sulphuric acid and ethylene oxide. Neutral salts and a defoamer have been used as processing ingredients during its manufacturing process. The product is used in the papermaking industry.

“**STALOK® 400**” is a modified cationic potato starch which is used in the papermaking industry.

30. The text of heading 38.09 refers to finishing agents and other products and preparations, of a kind used in the paper industry, not elsewhere specified or included. Heading 38.09 should therefore be applicable if the products at issue are not specifically covered by any other heading, e.g., by heading 35.05, which merit consideration in this particular case.
31. A majority of the delegates to the Scientific Sub-Committee felt that the addition of the very small quantities of other ingredients (other than starch) had not changed the character

of the modified starches, thereby turning them into preparations. It was also indicated that the functioning of the starch had not been improved by these additions.

32. With regard to the roles of the added ingredients, a majority of the delegates supported the view that the small amount of additives did not contribute to paper quality but were merely processing aids. The individual roles of the added ingredients are specified in paragraph 28 above.
33. Since heading 35.05 covers modified starches, products having the character of modified starches should be classified in that heading. In the text of heading 35.05 there is no reference concerning the end-use of the products falling in that heading; thus the heading would not exclude modified starches used in the paper making industry. In addition, the Explanatory Note to heading 35.05 (item (3) on page 643, item (4) on page 644) gives examples of specific types of modified starches used in the paper industry.
34. The products in question are clearly of a kind used in the paper industry. The products are also clearly based on modified starches. The question is, therefore, simply whether the added ingredients have changed the character of the modified starches to such an extent that they have become preparations.

IV. CONCLUSION

35. Taking account of the observations of the Scientific Sub-Committee and Secretariat's comments above, the Committee is requested to examine the classification of "CATO-SIZE® 52 A", "CATO® 15A", "Penford® Gum 270", "Astro X-101 Starch", "ETHYLEX® 2040 Gum" and "STA-LOK® 400".
-