



HARMONIZED SYSTEM  
REVIEW SUB-COMMITTEE

-  
25<sup>th</sup> Session  
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O. Fr.

Brussels, 28 January 2002.

POSSIBLE CREATION OF A NEW NOTE TO CHAPTER 69  
TO DEFINE THE TERM "REFRACTORY"  
(PROPOSAL BY THE AUSTRALIAN ADMINISTRATION)  
(Item III.B.9 on Agenda)

I. BACKGROUND

1. On 5 January 2002, the Secretariat received the following Note from the **Australian** Customs Service.

II. NOTE FROM THE AUSTRALIAN ADMINISTRATION

2. "As part of the Harmonized System (HS) Third Review, the **Australian** Customs Service requests that consideration be given to inserting a legal Note within Chapter 69 to differentiate between the goods of headings 69.02 and 69.03 and those of heading 69.04.
3. Paragraph (B) of the General Note to Sub-Chapter I of Chapter 69, on page 1141 of the Harmonized System Explanatory Notes (HSEN) (2002) indicates that headings 69.02 and 69.03 cover "... refractory goods, i.e, fired articles having the special property of resisting high temperatures as met in metallurgy, the glass industry, etc. (e.g., of the order of 1,500 °C and higher)". The Note further indicates that such goods must not only be capable of resisting high temperatures, but they must also be designed for high temperature work.
4. The HSEN (2002) to headings 69.02 and 69.03, on pages 1142 and 1143, respectively, do not mention the high temperature specification. However the HSEN (2002) to heading 69.04, at page 1145, direct that the heading covers "non-refractory ceramic bricks (i.e., bricks unable to withstand temperatures of 1,500 °C or higher) of the kinds commonly used for building walls, houses, industrial chimney stacks ...".

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

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5. It is therefore this administration's understanding that it is the HSEN intention that the delineation point to determine whether an article is a refractory product, is that product's ability to resist high temperatures to the order of 1,500 °C or higher.
6. Should this in fact be the case, notwithstanding this intention, this administration considers that it is possible to classify goods identified as refractory bricks in heading 69.04, as well as in heading 69.02. If one is to base classification on the 1,500 °C threshold, as set out in the HSEN, there have been several instances in **Australia** where imports of refractory bricks have been incorrectly entered under heading 69.02.
7. In each case the goods were referred to as refractory bricks on invoice descriptions, because that is what they were believed to be by the importer. However the goods were for particular refractory purposes where the temperature involved was considerably less than 1,500°C. The import documentation made no reference to temperature specifications, and as the headings themselves made no mention of temperature, classification of the goods was resolved without regard to the HSEN, because any need to do so was not apparent.
8. Although the HSEN clearly indicate that heading 69.04 covers non-refractory bricks, if a dispute situation were to arise that required the classification of refractory bricks to be determined by a tribunal or court, it is possible that the matter could be resolved without reference to the HSEN, if the tribunal or court preferred to use the ordinary definition of the words to determine the classification.
9. **Australia** regards the HSEN as a means to clarify the scope of headings/subheadings, in that they provide explanations and examples of the intended coverage at the international level. As such we have recourse to the HSEN after particular headings have been identified for consideration. We do not consider that one should have to initially refer to the HSEN in order to clarify whether a particular heading can be considered in the first place.
10. **Australia** has consulted a number of definitions of the term "refractory", however although most indicate that refractory products are able to withstand high temperatures – way in excess of the temperatures that can be withstood for the goods referred to above - the evidence of the exact temperature threshold as to when a product becomes a refractory product is somewhat inconclusive. For example :
  - The Macquarie Dictionary cites :

“ 4. a material having the ability to retain its physical shape and chemical identity when subjected to high temperatures. 5. (*p*) bricks of various shapes used in lining furnaces...”.
  - Chambers Science and Technical Dictionary cites :

“Materials used in lining furnaces, etc. They must resist high temperatures, changes of temperature... . China clay, ball clay and fireclay are all highly refractory, the best qualities fusing at above 1,700 °C”.
  - The Condensed Chemical Dictionary, Tenth Edition cites :

“An earthy, ceramic material of low thermal conductivity that is capable of withstanding extremely high temperature (1,650 – 2,200 °C) without essential change”.

- The McGraw-Hill Encyclopaedia of Science and Technology cites :  
 “One of a number of ceramic materials for use in high temperature structures or equipment. The term high temperatures is somewhat indefinite but usually means above about 1,800 °C (1,000 °C)...”.
- The Encyclopaedia Americana cites :  
 “... any variety of non metallic materials that can withstand high temperatures”. “The most important refractories are made of fireclays... Some fireclays can withstand temperatures up to 3,700 °F (2,050 °C).”

11. Should the Committee agree that an anomaly exists in differentiating between the goods of headings 69.02 and 69.03 and those of heading 69.04, **Australia** suggests the issue could be resolved by means of a legal Note. Based on the definitions cited above, **Australia** considers that the temperature threshold that is already contained within the HSEN, i.e., 1,500 °C, would be appropriate.
12. **Australia** therefore proposes that a legal Note within Chapter 69 be inserted as follows :

“For the purposes of headings 69.02 and 69.03, the term “refractory” means those goods that have the ability to resist a temperature of 1,500 °C and higher.”

### III. SECRETARIAT COMMENTS

13. The Secretariat wishes to point out that the practice of citing a temperature in the Explanatory Notes to Chapter 69 dates back to the first version of the CCCN (1955), which referred to a temperature “of the order of 1,600 °C” (see Doc. 4002). In 1973 this was reduced to 1,500°C at the proposal of the Nomenclature Committee (see Amending Supplement No. 27), the amendment being made by Corrigendum. It was this version which provided the basis for the preparation of the HS Explanatory Notes.
14. The Secretariat wishes to draw the Sub-Committee’s attention to the fact that a request identical to the one now received from **Australia**, i.e., to refer to this temperature criterion in Note 1 to Chapter 69, was rejected in 1977. In 1983 the **EC** re-opened this matter with a proposal - based on the content of ISO Standards 528-1966 and 1146-1969 and on a request from its ceramics industry – that the temperature criterion of “1,500 °C” be replaced in the Explanatory Notes by “1,200 °C”.
15. According to the **EC**, the property of resisting temperature of 1,500 °C and higher is too vague to determine refractory goods. A better criterion would be the melting point or better the refractoriness under load. Furthermore they state that the limit of 1,500 °C is so high that many refractory goods would be excluded. Therefore, it is suggested to replace “1,500° C” by “1,200 °C” (see Doc. 30.666). This proposal was initially accepted and placed in square brackets by the Joint Working Party on the Explanatory Notes, in September 1984, but was rejected by the two Committees (NC/53 and IHSC/3) in November of that year. Although the Report on their work does not give a precise reason why the proposal was

rejected, the Secretariat's understanding is that both Committees preferred to maintain the status quo.

16. The Secretariat is not opposed to the insertion of this legal Note, which would undoubtedly facilitate the classification of products in Chapter 69. However, the Secretariat wonders whether it might not be advisable to lower the threshold temperature of 1,500 °C. There are some products on the market which are specifically referred to in the texts of headings 69.02 and 69.03, such as blocks, bricks, retorts, crucibles, nozzles, etc, which are intended for refractory use but cannot easily meet the 1,500 °C criterion. The Secretariat's concern, shared by certain administrations, is whether the indications in this paragraph of the Explanatory Notes are perhaps more restrictive than the legal texts. In order not to have these products excluded from the headings concerned as a result of these indications, it would seem advisable to revise the threshold temperature.
17. Bearing in mind the history of this question, the Secretariat would favour a reference to 1,200 °C, which would seem likely to cover all the products encountered. There appears to be support for this interpretation in the "MacGraw-Hill Encyclopaedia of Science and Technology" which defines refractory goods as "ceramic materials for use in high temperature structures or equipment", adding that "the term high temperatures is somewhat indefinite but usually means above about 1,800 °F (1,000 °C) ....".

#### IV. CONCLUSION

18. The Sub-Committee is invited to examine the proposals made by the Australian Administration, in the light of the Secretariat comments made in paragraphs 13 to 17 above.
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