PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 21:2008 ICS 59.060.10

Coconut coir - Grading and classification



BUREAU OF PRODUCT STANDARDS

Department of Trade and Industry

Foreword

The development of the Philippine National Standard (PNS) for Coco Coir was undertaken in line with the commodities identified by the Department of Agriculture (DA) and Department of Trade and Industry (DTI) as priority. Essentially, the content of the PNS is based on the Administrative Orders (AOs) issued by the Fiber Industry Development Authority (FIDA). Upon public consultation meetings and discussions of the Technical Working Group (TWG), the major deviations from the AO were the setting of maximum moisture content and insertion of minimum % purity in Coir Mixed (CH-3).

The standard provides common language on definitions, minimum requirements, grading of coir, allowed tolerance, baling, and labeling.

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1 Scope

This standard specifies requirements and establishes a system of grading and classifying coir produced from the husks of coconut (*Cocos nucifera*, Linn.)

2 References

The titles of the standards publications referred to in this standard are listed on the inside back cover.

3 Definitions

3.1

bale

refers to the volume and manner of packing the fiber traded commercially

3.2

coir

coarse fiber extracted from the fibrous outer shell of a coconut

3.3

fair cleaning of coir

coir is of fair cleaning when the defibering process has not been properly done and the fiber is irregularly cleaned and stucked together, hence, there are considerable pulps present in the fiber. The strips shall not exceed one millimeter in width in the average

3.4

fiber

shall refer to any indigenous fiber derived from plants or from animals, such as hairs, feathers and silk. It shall be dominated and interpreted according to its common and commercial significance and not its scientific nomenclature

3.5

foreign matter

shall include, but not limited to dust, dirt, plastic, stone which are extraneous or foreign to the fiber

3.6

good cleaning of coir

coir is of good cleaning when the defibering process has more or less been properly carried out although in some cases the presence of pulps in the fiber is quite noticeable

3.7

grade

shall refer to the designation of fiber quality according to the established government standard thereof

4 Minimum requirements

In all grades subject to the special provisions for each grade and the tolerances allowed, coco coir shall meet the following requirements:

- 4.1 The coir must be thoroughly dry and shall not exceed 20 % moisture content (MC)
- **4.2** The coir must be of the same kind of cleaning.
- **4.3** The coir must be free from foreign matters.

5 Grading

Coconut coir shall be classified into five grades according to its strength, cleaning and color.

5.1 Coir good (CH-1)

This is the highest grade of coir. The fiber is of good cleaning with little or no pulp present in the bristle. The color ranges from light brown to almost dark brown. The length of fiber or bristle shall not be less than 5 inches. The texture is medium harsh.

5.2 Coir fair (CH-2)

In this grade, the fiber is of fair cleaning with considerable pulp present in the bristle. The color ranges from dull brown to dark brown approaching black. The length of fiber or bristle shall not be less than 5 inches. The texture is harsh.

5.3 Coir mixed (CH-3)

The fiber in this grade is a mixture of fibers of good and fair cleaning generally crumpled and tangled. The percent purity shall not be less than 90 percent. The color ranges from light brown to dull brown. The texture is medium to harsh. It must be free from coir dust and hard, undefibered portion of the husk.

5.4 Coir mattress (CH-4)

The fiber of this grade consists mostly of short crumpled fiber with average length of not less than 2 ½ inches. It must be free from coir dust and hard, undefibered husk. It is generally used for mattress, hence its name.

5.5 Coir saste (CH-W)

This grade consists of fibers less than 2 ½ inches long and or fibers with partially defibered portion of husk mixed with proportionate weight of coir dust. Predominant coir dust is not included in this grade.

6 Tolerances

In all grades, 5 % tolerance level for off-cleaning, color, length and texture shall be allowed in each shipment for CH-1 and CH-2 where no crumpled or tangled fiber is allowed.

7 Sampling

Sampling method to be used for ascertaining conformance to the requirements of this specification shall be in accordance with PNS/ISO 874.

8 Baling

Coco coir may be baled in this manner:

- **8.1** Every bale of coir shall contain only dry fibers of the same kind of cleaning and grade. The fibers must be free from plastic and foreign matters.
- **8.2** Immediately after pressing, coir shall be baled and bound securely by a suitable and strong material.
- **8.3** Grade coir waste (CH-W), mixture of dust and very short fibers may be packed in a suitable container of good material.

9 Labelling

The tagging and marking of bales shall be as follows:

- **9.1** Each bale shall bear a tag measuring 35 cm x 30 cm. The tag should be made of unstarched raw cotton. This shall be placed on one side of the bale underneath the binding sites.
- **9.2** The following shall be stamped on the long cloth tag placed inside the bale:
- **9.2.1** The words "PRODUCT OF THE PHILIPPINES";
- **9.2.2** The name of the company;
- **9.2.3** The name of the municipality or city where the establishment is located;
- **9.2.4** The initial of the station, the registered mark of the establishment, and the letter designation of the grade, the three (3) forming one line separated from each other by bars; and
- **9.2.5** The establishment number and lot number, the district of production and the date of pressing, the three (3) forming one line separated by bars.
- 9.3 All markings whether letter or numerals shall be stamped with clear indelible ink and shall not be less than 1 $\frac{1}{2}$ centimeters in height except the initial of the station, the registered mark of the establishment and the letter designation of the grade which shall not be less than four (4) centimeters.

10 Compliance and specification

When found to comply with the requirements specified in this Philippine Standard Specification, the lot, the batch, or the consignment from which the samples have been drawn, shall be deemed to comply with the Philippine National Standard Specification.

References PNS/BAFPS 21:2008

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

Fiber Industry Development Authority. Administrative Order No.2-05: Revised Official Standard for the Commercial Grades of Coir Produced from the Husks of Coconut (*Cocos nucifera* Linn.). 1992

Fiber Industry Development Authority. Revised Administrative Order No.1, Chapter 3: Baling, Taging, Marking and Inspection of Fibers. 1999.



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Department of Agriculture Technical Working Group (TWG) for the Development of Philippine National Standard (PNS) of Coco Coir Special Order No. 326, series of 2005

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