

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 38:2006
ICS 65.020.20

Fresh vegetables – Carrots (*Daucus carota* L.) – Specification



BUREAU OF PRODUCT STANDARDS

Foreword

The formulation of this Philippine National Standard for Carrots, **PNS/BAFPS 38:2006** was initially drafted by the Bureau of Agriculture and Fisheries Product Standards (BAFPS) with reference to US Standards for Grades of Carrots (1987), Canadian Grades and Standards for Fresh Fruits and Vegetables (1997), Food Terminal Inc. Quality and Grade Specifications for Carrots (1981) and CBT Product Grades, Packaging, Storage and Seasonality (1994).

This standard was reviewed by the BAFPS' Technical Committee prior to its presentation in a public consultation in Baguio City, the major producer of this commodity. Comments from the stakeholders were carefully evaluated and were inputted accordingly in the draft.

The Technical Committee created by BAFPS for this purpose was composed of experts from BSU-Benguet, BPI-NCRDC, DA-AMAS, DA-NAFC, PHTRC-UPLB, IPB-UPLB and the Vegetables Growers Association.

1 Scope

This standard establishes a system of grading and classifying carrots, *Daucus carota* L.

2 Reference

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

3 Definitions

For the purpose of this standard the following specifications shall apply:

3.1 Product definition

3.1.1 carrot

3.2 Essential composition and quality factors

3.2.1 Quality factors

3.2.1.1

clean

the individual carrot is practically free from dirt and other foreign matter

3.2.1.2

diameter

the greatest dimension of the carrot measured at right angles to the longitudinal axis

3.2.1.3

fairly clean

individual carrot is reasonably free from dirt and other foreign matter

3.2.1.4

fairly smooth

individual carrot is not rough, ridged, or covered with secondary rootlets to the extent that the appearance is materially affected

3.2.1.5

fairly well-colored

carrot has orange, red orange, or orange scarlet color, but not pale orange or distinct yellow color

3.2.1.6

fairly well-formed

individual carrot is not forked, or misshapen to the extent that the appearance is materially affected

3.2.1.7

firm

carrot is not soft nor shriveled

3.2.1.8

length

greatest dimension of the carrot measured from the shoulder to the lowest point which is not less than 0.64 cm. in diameter

3.2.1.9

similar varietal characteristics

carrots in a lot are of the same variety

3.2.1.9.1

well formed

individual carrot is not forked, or misshapen to the extent that the appearance is more than slightly affected

3.2.1.9.2

well trimmed

the tops are cut back to shoulder level

3.2.2 Defects

Examples of carrot with and without defect are shown in Annex A.

3.2.2.1

damage

any specific defect, which materially detracts from the appearance, or the edible or shipping quality of the individual carrot or the appearance of the sample as a whole

3.2.2.1.1

forking

branching of the root

3.2.2.1.2

growth cracks

healed wounds or splits, or which materially detract from the appearance of the individual carrot

3.2.2.1.3

mechanical damage

cuts, bruises, puncture and breaks that materially detracts the appearance of the carrot

3.2.2.1.4

sunburn

discoloration of the shoulder such as green or violet appearance

3.2.2.2

excessively rough

individual carrot is rough or ridged to the extent that the appearance is seriously affected

3.2.2.3

serious damage

any defect , or the combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the individual carrot or the appearance of the sample as a whole

3.2.2.4

seriously misshapen

individual carrot is forked or misshapen to the extent that the appearance is seriously affected

3.2.2.5

secondary new top growth

new leaves or cluster of the leaves which have developed outside the original central cluster of leafstems

4 Classification – Carrots shall be classified according to size and color (Refer to Table 1– Classification of Carrots).

5 Grading – Carrots shall be graded according to its variety, general appearance, quality and condition.

5.1 Grade 1 – Consists of carrots, which meet the following requirements:

The basic requirements include that with similar varietal characteristics, well trimmed, firm, clean, fairly well-colored, fairly smooth, and well-formed. It must be free from secondary new top growth and soft rot. Carrots must be free from damage caused by growth cracks , sunburn, disease and insect.

5.2 Grade 2 – Consists of carrots, which meet the following requirements:

The basic requirements include that with similar varietal characteristics, well-trimmed, firm, fairly clean, fairly well-colored, fairly smooth and fairly well- formed. It must be free from soft rot. Carrots must be free from damage caused by growth cracks, sunburn, disease and insect.

5.3 Grade 3 – Consists of carrots, which meet the following requirements:

The basic requirements include that with similar varietal characteristics, well trimmed, firm, not excessively rough and not seriously misshapen. It must be free from soft rot and free from serious damage caused by dirt, growth cracks, sunburn, disease and insect.

6 Sampling

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

7 Packing

Carrots shall be packed in a suitable container to protect the product from normal hazards of transportation and handling.

8 Marking and labeling

8.1 Each container shall be legibly labeled with the following information:

8.1.1 Name of the product;

8.1.2 Grade and Size classification;

8.1.3 Net weight in kilograms;

8.1.4 Brand name;

8.1.5 Name of producer; and

8.1.6 The words "Product of the Philippines".

9 Pesticide residue

Carrots shall comply with those maximum residue levels established by the Codex Alimentarius Commission for this commodity.

10 Hygiene

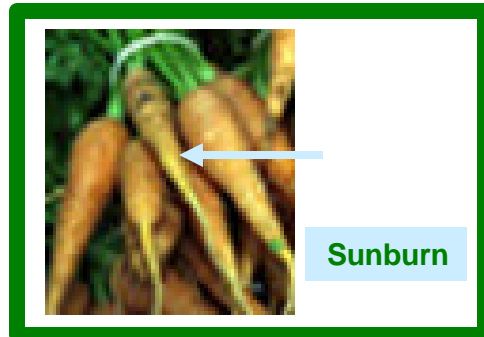
It is recommended that the produce covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1 – 1969, Rev. 3 – 1997, Amd. (1999), and other relevant Codex texts such as Codes of Hygiene practice and Codes of Practice.

Annex A

Table 1 – Size classification of carrots

Size classification	Diameter (cm)	Length (cm)
Large	4.8	> 15
Medium	3.0	13-14
Small	2.0	9- 12
Extra small	-	<9

Annex B



Carrot

References

PNS/B AFPS 38:2006

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 references document (including any amendments) applies.

CAC Vol. 2 (1993) – Pesticide Residue in Foods

CAC/RCP 1 – 1969, Rev. 3 – 1997, Amd. (1999) - Recommended International Code of Practice General Principles of Food Hygiene

Canadian Grades and Standards for Fresh Fruits and Vegetables (1997)

Food Terminal Inc. Quality and Grade Specifications for Carrots (1981)

PNS/ISO 874-Sampling and Methods of Analysis

US Standards for Grades of Carrots (Revised 1997)

CBT Product Grades, Packaging, Storage and Seasonality (1994)

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The use of the PS Certification Mark is governed by the provisions of Department Administrative Order No. 01 series of 1997 – Revised Rules and Regulations Concerning the Philippine Standard (PS) Quality and / or Safety Certification Mark Scheme by the Bureau of Product Standards. This mark on a product/container is an assurance by the manufacturer/producer that the product conforms with the requirements of a Philippine standard. Details of conditions under which a license to use the PS Certification Mark may be granted can be obtained from the Bureau of Product Standards, Department of Trade and Industry, 361 Sen. Gil J. Puyat Avenue, Makati City.



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