

UN/ECE STANDARD H-4
concerning the marketing and commercial
quality control of

CUT UNIFLORAL CARNATIONS
moving in international trade between and to
UN/ECE member countries

I. DEFINITION OF PRODUCE

This standard shall apply to fresh cut unifloral carnations of varieties (cultivars) of *Dianthus caryophyllus* and its hybrids, suitable for bouquets or for ornamental purposes.

II. PROVISIONS CONCERNING QUALITY

The purpose of this standard is to define the quality requirements of fresh cut carnations at the dispatching stage, after preparation and packaging¹.

A. Minimum requirements

Produce must have been carefully harvested, and to have reached an appropriate stage of growth, according to the species. In all classes, subject to the special provisions in each class and the tolerances allowed, the carnations must be:

- whole²
- fresh
- free of animal parasites.

¹ Reservation of the Federal Republic of Germany: see Note by the secretariat.

² This provision does not prevent there being signs of disbudding or the removal of axillary growth, secondary buds, leaves, etc., operations carried out during cultivation or after harvesting, in order to improve the presentation and/or the quality of the product.

The development and condition of the cut carnations must be such as to enable them to withstand transport and handling ensuring that they arrive in satisfactory condition at the place of destination.

B. Classification

The cut carnations are classified into three classes defined below.

(i) **Extra class**

The cut carnations in this class must be of superior quality. They must have the characteristics of the species and of the variety. All parts of the cut flowers must be:

- free from damage caused by parasites of animal or vegetable origin
- free of visible extraneous matter affecting the appearance
- unbruised
- free of defects in growth and formation: for the Mediterranean-type carnations the split calyx is not considered as defect of development.

Stems must be, according to species and variety, rigid, straight and strong so as to support the flower, and be without axillary growth, provided with sound leaves with well developed green colour, which can be missing on one third of the length of the lower part of the stem. The calyces must be full and firm.

(ii) **Class I**

The cut carnations in this class must be of good quality. They must have the characteristics of the species and of the variety. All parts of the cut flowers must be:

- practically free from damage caused by parasites of animal or vegetable origin
- practically free of visible extraneous matter affecting the appearance
- unbruised
- practically free of defects of development; for American-type carnations, flowers with split calyx must be ringed and put separately in uniform lots and the packages marked accordingly; for the Mediterranean-type carnation the split calyx is not considered as a defect of development.

Stems must be, according to species and variety, rigid and strong enough to support the flower, and be without axillary growth, provided with leaves normally developed, green, which can be missing on one third of the length of the lower part of the stem. Some calyces may be less filled and less firm.

(iii) **Class II**

This class comprises cut carnations which do not qualify for inclusion in the higher classes but satisfy the minimum requirement specified above.

The flowers may have the following defects:

- slight defects caused by disease parasites and treatment products
- slight visible extraneous matter
- slight bruising
- slight malformation.

Stems may be less rigid and less strong and provided with leaves, which can be missing on one third of the length of the lower part of the stem. The defects permitted must not impair the keeping quality, appearance or utility of the products.

III. PROVISIONS CONCERNING SIZING

For cut carnations, sizing must comply at least with the following scale:

Code	Length
5	5-10 cm
10	10-15 cm
15	15-20 cm
20	20-30 cm
30	30-40 cm
40	40-50 cm
50	50-60 cm
60	60-80 cm
80	80-100 cm
100	more than 100 cm

These lengths include the flower head.

The difference per unit of presentation (bunch, bouquet, box and the like) between the maximum and minimum lengths of the flowers in the unit may not exceed:

- 2.5 cm for flowers in codes 15 and below
 - 5.0 cm for flowers in codes 20 (inclusive) to 60 (inclusive)
 - 10.0 cm for flowers in codes 60 and above³.
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IV. PROVISIONS CONCERNING TOLERANCES *

The following tolerances in respect of quality and size are allowed for produce not satisfying the requirements of the class indicated in each package.

A. Quality tolerances

Quality tolerances shall be permitted in each unit of presentation (bunch, bouquet, box and the like).

- (i) **Extra Class**
Three per cent of the cut carnations by number may have slight defects, on condition that the uniformity of the flowers in a unit of presentation, is not affected.
- (ii) **Class I**
Five per cent of the cut carnations by number may have slight defects, on condition that the uniformity of the flowers in a unit of presentations, is not affected.

* In applying the percentage tolerance in practice, the tolerance will be considered as zero, depending on the number of stems in the unit of presentation, if the calculation gives a result of less than 0.5 per cent. The result will be rounded to the next higher whole number if the calculation gives a result equal to or greater than 0.5 per cent.

³ The difference may be doubled for flowers presented in tiered bunches.

(iii) **Class II**

Ten per cent of the cut carnations may vary from the requirements of the class. Half of this percentage may have been attacked by parasites of animal or vegetable origin.

The defects in question must not impair the utility of the products.

B. Size tolerance

Size tolerance shall be permitted in each unit of presentation.

In all classes 10 per cent of cut carnations may vary from the length requirements of the sizing code provided the length does not fall below the lower limit of the given size code.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

Each unit of presentation (bunch, bouquet, box and the like) must contain cut carnations of the same species or variety (cultivar) and of the same quality and must have reached a uniform stage of development. Cut carnations of Class II may be presented with a less uniform stage of development.

Mixtures of flowers or mixtures of flowers with foliage of different genus, species or variety (cultivar) are however permitted so long as products of the same quality are used and that they are appropriately marked.

The visible part of the unit of presentation must be representative of the entire unit.

B. Packaging

The carnations must be packed in such a way as to be properly protected.

The materials, and particularly the paper used inside the package, must be new, clean and of a quality such as to avoid causing any external or internal damage to the carnations. Newsprint, where used, must not come into direct contact with the produce.

C. Presentation

A unit of presentation (bunch, bouquet, box and the like) must consist of 5, 10 or 15 pieces, or a multiple of 10 pieces. However, this rule does not apply to the flowers for which the seller and the buyer have expressly agreed to derogate from the provisions concerning the number of flowers in a unit of presentation.

VI. PROVISIONS CONCERNING MARKING

The following particulars must accompany the goods either in the form of a label on the package, or in the form of an invoice easily accessible to the control service ⁴.

A. Identification

Packer)	Name and address or
and/or)	officially issued or
Dispatcher)	accepted code mark.

B. Nature of produce

- genus or species (binomial nomenclature)
- variety (cultivar) or colour of flowers
- Mediterranean-type (for carnation of split calyx in Extra Class and Class I)
- where appropriate the word "mixture" (or equivalent term)

C. Origin of produce

- country of origin and optionally district where grown or national, regional or local place name

⁴ Reservation of France: see Note by the secretariat.

D. Commercial specifications

- class
- where applicable size (length code) or minimum and maximum length
- number of stems, or number of bunches with the number of stems per bunch

If the number of flowers per unit of presentation does not correspond to the provisions of section V C. Presentation, packages must be marked to show the exact composition of the units of presentation.

E. Official control mark (optional)

This standard was first issued in 1980;
amended 1982 and 1985.