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Marketing and
Regulatory
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Agricultural
Marketing
Service

Specialty
Crops
Program

Specialty
Crops
Inspection
Division

Filbert/Hazelnut Kernels and Filberts in the Shell

Inspection Instructions

August 2016

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These instructions contain information and guidelines to help personnel of the U.S. Department of Agriculture's (USDA) Specialty Crops Inspection (SCI) Division uniformly apply and interpret U.S. grade standards, other similar specifications, and special procedures.

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Inspection instructions are issued by USDA after careful consideration of all data and views submitted. The Department welcomes suggestions for improving the inspection instructions in future revisions.

Comments may be submitted to:

Director, Specialty Crops Inspection Division
Specialty Crops Program
USDA, Agricultural Marketing Service
1400 Independence Avenue, SW, STOP 0240
Washington, D.C. 20250

These instructions replace the Filbert/Hazelnut Kernels And Filberts In The Shell dated January 2008, and include, but not limited to, all previous correspondence, memos, inspection instructions, or procedures.

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PART I – FILBERT/HAZELNUT KERNELS

GENERAL

These instructions are to be used by inspection program personnel when applying the [Oregon Grade Standards for Filbert \(Hazelnut\) Kernels \(603-051-0305 through 603-051-0325\)](#) to imported and domestically produced kernels. There is no U.S. Standards for shelled filberts. This section provides guidelines not covered by the Oregon grade standards, General Shipping Point Manual, General Market Manual, [marketing order](#), or [import regulations \(§999.400\)](#) and do not establish any new or essential rules.

The Oregon standards are based on the metric system of weights and measures. The application requires use of sizers and scales calibrated in metric terms. Scales should have the capability of recording tenths of grams. All weights will be reported in tenths of a gram and percentages in hundredths of a percent.

The designations “Filberts” and “Hazelnuts” are used interchangeably for nuts of the same genus. Domestically, the designation “Filbert” is used for nuts from European species of trees and “Hazelnut” for American. For the purpose of these instructions the designation “Filbert” will be used for both species. “Hazelnut” is the generally accepted standard designation of commodity with occasionally used interchangeably.

Filberts are grown on a commercial basis in many parts of the world with Turkey being a major source of supply. Oregon and Washington account for the major portion of domestic production.

REPRESENTATIVE SAMPLING

Obtaining representative samples is essential. Accurate certification is possible only if the samples examined are truly representative of the entire lot or accessible portion. Sample all portions of a lot or load even if it is difficult to reach all layers or parts. If you cannot access the entire lot for sampling, restrict the inspection and certificate to the accessible portion.

Certifications of export lots and lots being imported must be unrestricted. Submitted samples may be analyzed and certified as to quality, size, etc.; as long as the certificate clearly indicates the certification covers only the samples submitted. Under traditional inspection, only officially licensed inspectors will draw samples, representing lots intended for certification.

CHECK SAMPLES

Market inspectors must draw enough kernels to provide for a sample for analysis and a check sample. The check sample, equal in size to the sample for analysis, will be retained at the inspection office for at least 30 days. Shipping point inspectors are not required to draw “check” samples during inspection unless specifically instructed by supervisors. When requested, kernels not destroyed during inspections and all check samples will be returned to the applicant at their expense. Otherwise, dispose of samples according to section [51.22](#) of the Regulations Governing Inspection, Certification and Standards for Fresh Fruits, Vegetables, and Other Products.

IN-LINE INSPECTIONS

In-line inspection provides a continuous inspection while the filberts are being processed. Samples are usually taken during packing at the end of the sizing and grading line. The samples are drawn and analyzed in order to monitor the quality throughout the packing process. In-line inspections are also a way of keeping the applicant informed as to compliance with the intended grade throughout packing.

CARRIER OR LOT INSPECTIONS

The standards provide for inspection on the basis of a composite sample. This will consist of kernels drawn from units representative of the lot. Any container or groups of containers in which the kernels are obviously of a quality, type, or size materially different from that in the majority of containers, will be considered a separate lot and should be sampled and certified separately.

SIZE OF SAMPLE

The official sample size will vary in relation to the size of the lot, with a minimum of 600 grams per lot. A sample size double the amount analyzed is necessary to account for the retained check sample. A minimum of 200 grams for each 5,000 pounds packed will be analyzed.

Stationary lots of hazelnut samples for will be composited for analysis, unless otherwise requested or specified. The following table indicates the size of sample and minimum grams analyzed per lot.

Lot Size	Grams Drawn	Grams Analyzed
15,000 lbs. and under (6,804 kg.)	1,200	600
Each additional 5,000 lbs. (2,268 kg)	+ 400	+ 200

The approximate weight of the grams sampled and the weight of the grams analyzed must be reported on the notesheet.

An [SC-187](#) (Notice of Sampling Form – intranet link) must accompany samples sent to another office for analysis.

NUMBER OF CONTAINERS SAMPLED FOR COMPOSITE

The suggested minimum numbers of containers sampled for the various types of packaging are as follows:

- Filberts that are packed in bags containing 100 or more pounds will be sampled at a minimum rate of 5 percent.
- Filberts that are packed in cartons containing less than 100 pounds will be sampled at a minimum rate of 2 percent.
- Filberts that are packed in bulk bins or bulk poly sacks (super sacks) will have a sample drawn from each bulk bin or sack.
- Filbert lots of less than 50 containers will have at least 5 containers sampled.

Sample approximately the same amount of kernels from each container, varying the location in the container where the sample is being drawn.

CONSUMER SIZE CONTAINERS

Master containers will be sampled representatively at the rate of 1 for every 50 containers in the lot with a minimum of 20 master containers sampled when in one-pound or less consumer packages and 15 when more than one-pound packages. Remove one consumer size package from each master container sampled and use in the composite sample. The location the package is taken from should be varied in each master container.

SAMPLE FOR CUTTING TO DETERMINE INTERNAL DEFECTS

For in-line and lot inspections, for every 200 gram sample examined, 10 kernels not affected by other defects will be cut for internal defects. If a scorable internal defect is found in the 10 kernels, cut the entire 200 grams and add the percentage of internal defects to the total defects for the 200 grams examined. For the next 200 gram sample examined return to cutting 10 kernels.

TOLERANCES AND APPLICATION OF STANDARDS

TOLERANCES

Filbert kernels are inspected utilizing the [Oregon Grade Standards for Filbert \(Hazelnut\) Kernels \(603-051-0305 through 603-051-0325\)](#), or the USDA, AMS, Fruit and Vegetable Program, [Import Requirements for Hazelnuts \(§999.400\)](#).

SUMMARY OF TOLERANCES

	Oregon Fancy and Oregon No. 1	Marketing Order and 8e Import Requirements, Exhibit A	Oregon No. 1 Whole and Broken
Foreign Material			
Foreign Material	0.02 of 1%	0.02 of 1%	0.02 of 1%
Mixed Types			
Mixed Types (Oregon Fancy only)	10%	N/A	N/A
Defects			
A. Total Defects	10%	5%*	5%*
B. Serious damage caused by serious shriveling and broken kernels (included in A.)	5%	N/A	N/A
C. Moldy, rancidity, decay, or insect injury (included in A. & B. – Oregon Fancy/No. 1) (included in A. – Marketing Order, 8e Import Requirements, and Oregon No. 1 Whole and Broken)	1%	2%	1%
D. Mold, rancidity, or insect injury (included in C.)	N/A	1%	N/A
Size			
E. Off-size	15%	N/A	N/A
F. Undersize (included in E.)	10%	N/A	N/A

* Serious damage defects only, not including broken kernels.

APPLICATION OF STANDARDS

The grade of a lot of filbert kernels must be determined on the basis of a composite sample drawn from containers in various locations in the lot. However, any container or group of containers in which the filberts are obviously of a quality, type, or size materially different from that in the majority of containers should be considered a separate lot, and sampled separately.

Inspection Instructions for Filbert/Hazelnut Kernels and
Filberts in the Shell (August 2016)

NOTESHEET AND CERTIFICATE

Entries on the notesheet and certificate must be legible and accurate. Support all information appearing on the certificate by information on the notesheet. All information and notations must be properly recorded so that anyone familiar with inspection procedures can understand them and write a certificate. Notesheets and certificates are prima facie evidence and must withstand legal scrutiny.

Detailed instructions about dates, inspection points, places of inspection, types of carriers, lading, and other items not covered by these instructions may be found in the [General Shipping Point Manual](#), [General Market Manual](#), Federal-State Inspection Certificate (FV-184) Manual, or [Fresh Fruit and Vegetable Inspection Certificate \(FV-300\) Manual](#). Contact your supervisor for anything not covered in these instructions.

TIME AND DATE

Report the date and time that the sample was drawn and analyzed, when a sample is analyzed on a day other than when it was drawn, the date that the sample was analyzed will be reported on the certificate, and the “sample drawn” time and date should be reported in the “Remarks” section.

For samples drawn at one inspection location or market and analyzed at another, enter the information in the “Remarks” section of the certificate. For example: “Sample drawn on 07/25/16 in Washington, D.C. 10:30 am and analyzed on 07/27/16 in Newark, N.J. 11:00 am.” An [SC-187](#) (Notice of Sampling Form – intranet link) must accompany samples sent to another office for analysis.

PRODUCT

The common name “Filbert Kernels” or “Hazelnut Kernels” will be used to describe this commodity in the product heading. A descriptive term such as “blanched” may be reported in the “Product/Variety” section on the shipping point notesheet and certificate or in the “Lot ID” section on market notesheets and certificates.

TYPE OF FILBERT

As a general policy filberts should be described as round type or long type. The Inspection Service does not certify variety. When variety is in question, the inspector must inform interested parties that only type may be certified.

Refer to visual aid [FIL-1-IDENT](#) identifying round types and long types.

NUMBER/TYPE OF CONTAINERS

Always report the number of containers. In the market and at shipping point locations for stationary lot certification, always verify the container count provided by the applicant for each lot and report it as the “inspector’s count.” When the number of containers available for inspection does not match the application, confirm that the amount presented for inspection constitutes the lot. If an accurate count cannot be determined, report the count at someone else’s authority, but also report the reason for doing so on the notesheet (e.g., numerous pallets with mixed product).

At shipping point locations for “days-run” certification, the manifest for count typically provided by the applicant is acceptable to use for reporting the number of containers.

Shelled filberts are generally packed and shipped in non-lined, poly-lined, or vacuum packed cartons, as well as bulk bins or bulk poly sacks (Super Sacks). Shelled filberts marketed in consumer size packages such as film bags and shrink-wrap trays are generally packed in master cartons.

BRANDS/MARKINGS

At shipping point, report the brand, type, size, color, Positive Lot Identification (PLI), and other important information appearing on the container on the notesheet and certificate in the appropriate sections.

At market, report the brand, type, size, color, count, grade, weight, point of origin, and other important information appearing on the container on the notesheet in the “Brands/Marks” section. On the certificate, report only the brand name and other pertinent information in the “Brand/Markings” section.

ORIGIN

Do not make a positive statement about origin on your own authority; rather, quote the container markings that list the state or country of origin in the appropriate space on the notesheet and the certificate. If origin is not marked, try to obtain this information from the applicant. This policy is necessary because some firms may use one mark on the same product packed in several states.

SIZE

When determined, the sizing should take place before analyzing the sample for possible defects. Use a sizer with round openings, calibrated in millimeters, and pass the kernels through the opening at any angle. The size will be reported in connection with the grade according to the requirements of the standards. The size heading should be blocked out for inspections based on the whole and broken grade.

REMARKS

A statement as to whether a lot meets or fails a marketing order agreement or import requirement will be shown under “Remarks” or on approved certificates that indicate lot status through the use of check boxes. Any other pertinent information that concerns the quality or disposition of the lot should be reported in this section.

DEFECTS

After percentages of any off size have been determined, the kernels should be returned to the sample for analysis of defective kernels.

BROKEN KERNELS

During shelling and processing, the machinery sometimes chips filbert kernels.

Scoring Guide

Serious damage: Score when more than 1/4 of the original whole kernel is broken off. Do not score in Oregon No. 1 Whole and Broken, or when applying the marketing order or import requirements.

CHAFING OR SCRAPING

Filbert kernels are normally covered with a brown skin. During the shelling or sorting process the kernels may come into contact with each other or with the machinery with enough force to cause the skin and/or meat to become shaved or scraped off.

Scoring Guide

Damage: Score when it extends into the meat and affects more than 1/8 to 1/4 of the surface area. Do not score as damage when only the skin is scraped off and the meat is smooth.

Serious damage: Not scored as serious damage.

CLEANNESS

Clean is defined as practically free from plainly visible adhering dirt or other foreign material. This is a requirement of all Oregon grades, the marketing order and import requirements.

Scoring Guide

Score against the total tolerance for the grade being applied when there is visible dirt adhering to the kernel.

EXTERNAL DISCOLORATION

Although not a significant issue, external discoloration may affect shelled filberts during certain years.

Scoring Guide

Damage: Score when external discoloration is black and materially affects the appearance. Kernels affected by dark brown color should not be scored.

Serious damage: Not scored as serious damage.

FOREIGN MATERIAL

Foreign material is any substance other than kernels or portions of kernels not adhering to the kernel and is scored against the tolerance for foreign material.

Scoring Guide

Loose skins, pellicles or corky tissue in the sample are not scored against the tolerance for foreign material until they exceed 0.02% (2/100th of 1%), by weight, of the sample. Whole (un-cracked) in-shell filberts in the sample are scored against the tolerance for foreign material.

INSECT INJURY

Insect injury is an objectionable defect of filberts. Close examination is important when inspecting kernels for insect injury because, during hulling, drying and shelling, the webbing and frass may be separated from the kernel and the only evidence of injury is a very small clean round hole.

Scoring Guide

Serious damage: Score insect injured kernels and those showing any evidence of worm injury, frass, webbing, etc.

INTERNAL FLESH DISCOLORATION

A representative sample of the lot should be cut to determine the percent of kernels affected by internal discoloration.

Refer to the [Sample for Cutting to Determine Internal Defects](#) section in this book for additional guidance.

Scoring Guide

Damage: Score only those kernels showing black discoloration within the kernel cavity. The brown stain found within the internal cavity of some types of filberts is not scored as it occurs naturally.

Serious damage: Not scored as serious damage.

MIXED TYPES (OREGON FANCY ONLY)

The Oregon Fancy grade requires that filbert kernels are to be “similar type.” This means that the kernels are of the same general type and appearance (for example, kernels of the round type should not be mixed with those of the long type). Color of the kernels should not be considered since there is often a difference in the skin color of kernels of similar type.

Inspectors are cautioned against scoring a mixture of varieties since it is permissible to mix varieties provided they are of the same type.

Scoring Guide

Damage: Score nuts that are distinctly of a different type, round with long or vice versa.

Serious damage: Not scored as serious damage.

MOISTURE CONTENT

The Oregon standards define well dried as meaning the kernels are firm and crisp with moisture content not more than 6 percent. Firm and crisp kernels usually indicate that moisture content is 6 percent or less. Under these circumstances, it will not be necessary to determine moisture content.

To determine moisture content, a randomly drawn one-pound sample of kernels should be submitted, in an airtight container, to the nearest Federal or Federal/State office equipped with the proper instruments to perform an analysis. It should be accompanied by the original of a “Notice of Sampling” certificate ([SC-187](#) – intranet link) with the following “Remarks” statement: “Sample submitted for determination of moisture content.”

MOLD

Mold often occurs on the tips of kernels that have been exposed to moisture entering through a split shell. Mold may appear as slight whitish, gray or even pink growth in the cracks and on the ridges/tip of the kernel. Mold may also appear as hair-like strands along the length of the kernel. Brown discolored kernels without visible growth of mold are not considered moldy. However, mold may only be evident within the inner cavity. A representative sample must always be cut to determine the amount of cavity mold present in a lot.

Refer to the [Sample for Cutting to Determine Internal Defects](#) section.

Scoring Guide

Serious damage: Score mold when visually present on the kernel without magnification under normal lighting conditions.

Visual aid: See [FIL-3-IDENT](#).

RANCIDITY

Kernels should be scored as rancid only if they are noticeably rancid tasting. A stale flavor or an oily appearance of the kernel does not necessarily indicate rancidity.

Scoring Guide

Serious damage: Score kernels when noticeably rancid tasting.

Visual aid: See [FIL-4-IDENT](#).

SHAPE

All grades, except the Oregon No. 1 Whole and Broken, require the kernels to be free from damage caused by deformity.

Scoring Guide

Damage: Score deformed kernels in which the appearance is materially affected and double kernels that have become separated.

Serious damage: Not scored as serious damage.

Visual aid: See [FIL-CP-4](#).

SHRIVELING

Kernels may shrivel as a result of moisture loss.

Scoring Guide

Damage: Score when the kernel is materially shrunken, wrinkled, and tough.

Serious damage: Score when kernel is seriously affected by shriveling.

Visual aid: See [FIL-CP-3](#).

TYPE

The Oregon Fancy grade requires that nuts be of similar type. The Oregon No. 1 grade allows for mixed types.

Scoring Guide

Damage: Score nuts that are distinctly different types, such as round mixed with long.

Serious damage: Not scored as serious damage.

Visual aid: See [FIL-1-IDENT](#).

DECAY

Kernels or portions of kernels showing decomposed areas are scored as decay against all grades. An external sunken area under the skin of a kernel may be the only indication of decay. In order to determine the presence or absence of decay in the sunken area it is necessary cut or break the kernel to expose the underlying flesh.

Scoring Guide

Serious damage: Score any kernels or portions of kernels showing decomposed areas.

Visual aid: See [FIL-2-IDENT](#).

PART II – FILBERTS IN THE SHELL

GENERAL

The words “Filbert” and “Hazelnut” are often used interchangeably. In the United States the word Filbert is commonly used for nuts derived from European species of trees, while nuts from Native American trees are called Hazelnuts.

This section provides guidelines not covered by the United States grade standards, General Shipping Point Manual, General Market Manual, [marketing order](#) or [import regulations \(§999.400\)](#) and do not establish any new or essential rules.

Any portion of these instructions beginning with §51 and followed with **bold** print is material copied directly from the [U.S. Standards for Grades of Filberts in the Shell](#).

REPRESENTATIVE SAMPLING

Obtaining representative samples is essential. Accurate certification is possible only if the samples examined are truly representative of the entire lot or accessible portion. Sample all portions of a lot or load even if it is difficult to reach all layers or parts. If you cannot access the entire lot for sampling, restrict the inspection and certificate to the accessible portion.

Certifications of export lots and lots being imported must be unrestricted. Submitted samples may be analyzed and certified as to quality, size, etc.; as long as the certificate clearly indicates the certification covers only the samples submitted. Under traditional inspection, only officially licensed inspectors should draw samples, representing lots intended for certification.

CHECK SAMPLES

Market inspectors must draw enough filberts to provide for a sample for analysis and a check sample. The check sample, equal in size to the sample for analysis, should be retained at the inspection office for at least 30 days. Shipping point inspectors are not required to draw “check” samples during in-line inspection unless specifically instructed by supervisors. When requested, filberts not destroyed during inspections and all check samples should be returned to the applicant at their expense. Otherwise, dispose of samples according to section [51.22](#) of the Regulations Governing Inspection, Certification and Standards for Fresh Fruits, Vegetables, and Other Products.

IN-LINE INSPECTIONS

In-line inspection provides a continuous inspection while the filberts are being processed. Samples are usually taken during packing at the end of the sizing and grading line. The samples are drawn and analyzed in order to monitor the quality throughout the packing process. In-line inspections are also a way of keeping the applicant informed as to compliance with the intended grade throughout packing.

CARRIER OR LOT INSPECTIONS

The standards provide for inspection on the basis of a composite sample. This will consist of filberts drawn from units representative of the lot. Any container or groups of containers in which the filberts are obviously of a quality, type, or size materially different from that in the majority of containers, will be considered a separate lot and should be sampled and certified separately.

SIZE OF SAMPLE

The official sample size will vary in relation to the size of the lot, with a minimum of 300 count per lot. A sample size double the amount analyzed is necessary to account for the retained check sample. A minimum of 100 count for each 5,000 pounds packed will be analyzed.

Stationary lots of hazelnut samples for will be composited for analysis, unless otherwise requested or specified. The following table indicates the size of sample and minimum count analyzed per lot.

Lot Size	Filberts Sampled	Filberts Analyzed
15,000 lbs. and under (6,804 kg.)	600	300
Each additional 5,000 lbs. (2,268 kg)	+ 200	+ 100

An [SC-187](#) (Notice of Sampling Form – intranet link) must accompany samples sent to another office for analysis.

NUMBER OF CONTAINERS SAMPLED FOR COMPOSITE

The suggested minimum numbers of containers sampled for the various types of packaging are as follows:

- Filberts that are packed in bags containing 100 or more pounds will be sampled at a minimum rate of 5 percent.

- Filberts that are packed in containers containing less than 100 pounds will be sampled at a minimum rate of 2 percent.
- Filberts that are packed in bulk bins will have a sample drawn from each bulk bin.
- Filbert lots of less than 50 containers will have at least 5 containers sampled.

Sample approximately the same amount of filberts from each container, varying the location in the container where the sample is being drawn.

CONSUMER SIZE CONTAINERS

Master containers will be sampled representatively at the rate of 1 for every 50 containers in the lot with a minimum of 20 master containers sampled when in one-pound or less consumer packages and 15 when more than one-pound packages. Remove one consumer size package from each master container sampled and use in the composite sample. The location the package is taken from should be varied in each master container.

INSPECTION EQUIPMENT

The following equipment is needed for inspecting filberts in the shell:

- **Nut cracker** – a hand sheller equipped with sharp jaws, which snip off the shell in two operations is the most satisfactory cracker. This type cracker enables the inspector to readily detect blank nuts and kernels, which are not reasonably well developed. A hammer may be used but care should be taken to not crush the kernel during cracking.
- **Adequate light** – a fluorescent light is preferable to natural daylight because it will provide about the same intensity of light at all times, permitting more uniform interpretation of grade factors. Inspectors should not proceed with an inspection unless adequate lighting is available.
- **Sizer** – a sizer with the necessary round hole openings will be used which may include combinations of 34/64, 35/64, 44/64, 45/64, 47/64, 48/64, 49/64, 56/64, and 58/64 inch in diameter. These sizes correspond to minimum and maximum diameters specified for size classifications of the standards.

TOLERANCES AND APPLICATION OF STANDARDS

TOLERANCES

§51.1995 U.S. No. 1...

- (f) **Tolerances:** In order to allow for variations incident to proper grading and handling, the following tolerances, by count, are permitted as specified:
- (1) **For mixed types.** 20 percent for filberts which are of a different type.
 - (2) **For defects.** 10 percent for filberts which are below the requirements of this grade: *Provided*, That not more than one-half of this amount or 5 percent shall consist of blanks, and not more than 5 percent shall consist of filberts with rancid, decayed, moldy or insect injured kernels, including not more than 3 percent for insect injury.
 - (3) **For off-size.** 15 percent for filberts which fail to meet the requirements for the size specified, but not more than two-thirds of this amount, or 10 percent shall consist of undersize filberts.

SUMMARY OF TOLERANCES

	U.S. No. 1	8e Import Requirements
Mixed Types		
Mixed Types	20%	20%
Defect		
A. Total Defects	10%	10%
B. Blanks (included in A.)	5%	5%
C. Rancid, decayed, moldy, or insect injured kernels (included in A.)	5%	5%
D. Insect injury (included in A. & C.)	3%	2%
Size		
E. Off-size	15%	15%
F. Undersize (included in E.)	10%	10%

APPLICATION OF STANDARDS

The grade of a lot of filbert kernels must be determined on the basis of a composite sample drawn from containers in various locations in the lot. However, any container or group of containers in which the filberts are obviously of a quality, type, or size materially different from that in the majority of containers should be considered a separate lot, and sampled separately.

In grading the sample, each filbert should be examined for defects of the shell before being cracked for kernel examination. A filbert should be classed as only one defective nut even though it may be defective externally and internally.

NOTESHEET AND CERTIFICATE

Entries on the notesheet and certificate must be legible and accurate. Support all information appearing on the certificate by information on the notesheet. All information and notations must be properly recorded so that anyone familiar with inspection procedures can understand them and write a certificate. Notesheets and certificates are prima facie evidence and must withstand legal scrutiny.

Detailed instructions about dates, inspection points, places of inspection, types of carriers, lading, and other items not covered by these instructions may be found in the [General Shipping Point Manual](#), [General Market Manual](#), Federal-State Inspection Certificate (FV-184) Manual, or [Fresh Fruit and Vegetable Inspection Certificate \(FV-300\) Manual](#). Contact your supervisor for anything not covered in these instructions.

TIME AND DATE

Report the date and time that the sample was drawn and analyzed. When a sample is analyzed on a day other than when it was drawn, the date that the sample was analyzed will be reported on the certificate, and the “sample drawn” time and date should be reported in the “Remarks” section.

For samples drawn at one inspection location or market and analyzed at another, enter the information in the “Remarks” section of the certificate. For example: “Sample drawn on 07/25/16 in Washington, D.C. 10:30 am and analyzed on 07/27/16 in Newark, N.J. 11:00 am.” An [SC-187](#) (Notice of Sampling Form – intranet link) must accompany samples sent to another office for analysis.

PRODUCT

The common name “Filberts” or “Hazelnuts” should be used to describe this commodity in the product heading. Type (round or long) may be reported in conjunction with

Filberts or may be reported in the “Product/Variety” section on the shipping point inspection certificates or in the “Lot ID” section on market notesheet and certificate.

TYPE OF FILBERT

As a general policy filberts should be described as round type or long type. The Inspection Service does not certify variety. When variety is in question, the inspector must inform interested parties that only type may be certified.

Nuts that are distinctly different types, round mixed with long, should be scored against the tolerance for mixed types. Inspectors should not score a mixture of varieties. It is permitted to mix varieties, provided they are of the same type.

Refer to visual aid [FIL-1-IDENT](#) identifying round types and long types.

NUMBER/TYPE OF CONTAINERS

Always report the number of containers. In the market and at shipping point locations for stationary lot certification, always verify the container count provided by the applicant for each lot and report it as the “inspector’s count.” When the number of containers available for inspection does not match the application, confirm that the amount presented for inspection constitutes the lot. If an accurate count cannot be determined, report the count at someone else’s authority, but also report the reason for doing so on the notesheet (e.g., numerous pallets with mixed product).

At shipping point locations for “days-run” certification, the manifest for count typically provided by the applicant is acceptable to use for reporting the number of containers.

Filberts in the shell are generally packed and shipped in sacks, cartons, or bulk bins. Filberts in the shell are marketed in consumer size packages such as film bags and shrink-wrap trays generally packed in master cartons.

BRANDS/MARKINGS

At shipping point, report the brand, type, size, color, Positive Lot Identification (PLI), and other important information appearing on the container on the notesheet and certificate in the appropriate sections.

At market, report the brand, type, size, color, count, grade, weight, point of origin, and other important information appearing on the container on the notesheet in the “Brands/Marks” section. On the certificate, report only the brand name and other pertinent information in the “Brand/Markings” section.

ORIGIN

Do not make a positive statement about origin on your own authority; rather, quote the container markings that list the state or country of origin in the appropriate space on the notesheet and the certificate. If origin is not marked, try to obtain this information from the applicant. This policy is necessary because some firms may use one mark on the same product packed in several states.

SIZE

Filberts are commercially sized on machines with rotating cylinders having successive sections, which contain round openings of certain sizes. The round openings are graduated in sixty-fourths of an inch.

Size is the first factor to be determined when grading a sample of filberts. Usually the size is specified by the applicant or is marked on the container. The size for each lot inspected must be determined and shown on the certificate in connection with the grade. It may be shown as a size classification (Jumbo, Large, Medium or Small) or in terms of a minimum diameter or minimum and maximum diameters. Size is not a requirement of the grade. A lot may meet grade requirements, but fail size requirements; or fail grade requirements, but meet size requirements. No lot may fail to grade U.S. No. 1 account of excessive off-size.

When a lot is certified as No. 1, the usual "Within tolerance" statement will be made in reporting off-size unless the applicant requests that actual percentages be reported. Whenever a lot fails to meet the specified size, the percentage of off-size (undersize and oversize) must be reported on the certificate. The standards provide a lot tolerance of 15 percent for off-size, but only two-thirds of this amount or 10 percent may be undersize.

Size should be determined before grading the sample for external and internal defects. Follow the sampling guide and procedures to obtain the composite sample. Then thoroughly mix the composite sample and randomly obtain a minimum of 100 nuts for sizing and grading. Pick out all nuts which pass through the specified minimum size opening and those that will not pass through the specified maximum size opening and record the number of each on a notesheet. Never exert pressure to force nuts through the minimum size opening. (See the [Size Classification](#) section for a breakdown of sizes).

When determining maximum size, it may be necessary to turn the nut at various angles in order to get it through the opening. If it will go through at any angle do not score the nut as oversize.

Examples of size statements:

- Nuts conform to size as marked. Off-size within tolerance.
- Nuts generally range from 49/64 to 56/64 inch in diameter. 10% off-size including 6% undersize, 4% oversize.

SIZE CLASSIFICATIONS

The table below outlines the size classifications in Table I of the U.S. Standards for Grades of Filberts in the Shell.

	Maximum size (in inches) Will pass through a round opening of the following size	Minimum size (in inches) Will not pass through a round opening of the following size
Round Type Varieties		
Jumbo	No maximum	56/64
Large	56/64	49/64
Medium	49/64	45/64
Small	45/64	No minimum
Long Type Varieties		
Jumbo	No maximum	47/64
Large	48/64	44/64
Medium	45/64	34/64
Small	35/64	No minimum

8E IMPORT SIZE REQUIREMENTS

[Import Regulations for Filberts \(§999.400\)](#) require that inshell filberts be at least a medium size.

DEFECTS

After the percentage of off-size is determined, segregate all nuts with external defects (shell defects) from the sample. These segregated nuts should be cracked separately to avoid scoring an individual nut twice against the tolerance for defects. A nut having an external and an internal defect should be scored only once against the most serious defect. However, an individual nut which is defective, off-size, and of a different type should be scored against each of the separate tolerances, that is, scored three times.

BLANKS

All nuts (without kernels or those which have small undeveloped kernels), which fill less than an estimated one-fourth of the capacity of the shell, will be scored against the 5 percent tolerance for blanks.

Scoring guide:

Damage: Score nuts that have no kernels or those with kernels that fill less than one-fourth the capacity of the shell.

Serious damage: Not scored as serious damage.

CLEANNES AND BRIGHTNESS

Filberts are required to be “clean and bright.”

§51.2000 Clean and bright...the individual filbert and the lot as a whole are practically free from adhering dirt and other foreign material, and that the shells have characteristic color.

Filberts are generally washed and/or bleached before packing. Individual nuts with noticeable adhering dirt or foreign matter will be scored against the 10 percent total defect tolerance. If the lot as a whole is materially affected with adhering dirt or foreign matter, it should be described in general terms. The following terms or combination of terms may be used to describe cleanness and brightness:

- Clean And Bright
- Fairly Clean And Fairly Bright
- Slightly Dirty And Slightly Dull

Scoring Guide

Damage: Score when there is noticeable adhering dirt or foreign material.

Serious damage: Not scored as serious damage.

DEVELOPMENT

Filbert kernels are required to be “reasonably well developed.”

§51.2004 Reasonably well developed...the kernel fills one-half or more of the capacity of the shell.

A kernel, which fills one-half or more of the capacity of a shell, is considered reasonably well developed. The term well developed should not be used. See the [Blanks](#) section for kernels filling less than one-fourth the capacity of a shell.

Scoring Guide

Damage: Score kernels which fill one-fourth, but less than one-half of the capacity of a shell as “Underdeveloped.”

Serious damage: Not scored as serious damage.

GREENISH-TAN DISCOLORATION AND/OR RIDGING OF SHELLS

The exact cause of this disorder is not known, it may result from sunburn or it may be physiological in nature. It should be described on the certificate (greenish-tan discoloration of the shells, ridging of the shells, or greenish-tan discoloration and/or ridging of shells).

Scoring Guide

Damage: Score if it materially affects the appearance of the individual filberts.

Serious damage: Not scored as serious damage.

Visual aids: See [FIL-CP-2 and FIL-CP-2-A](#).

INSECT INJURY

Insect injury is the most serious defect of filberts and small percentages may be found in practically all orchards. Insect injury can generally be detected by a small hole at the center of the stem scar where a small insect larva (worm) enters the nut. In most cases, the larvae grow and eventually leave the nut by going through the same hole used for entry. A filbert shell with the characteristic hole in it but does not contain any kernel is considered a blank.

Scoring Guide

Serious damage: Score wormy kernels and those showing any evidence of worm injury, frass, webbing, etc.

KERNEL DISCOLORATION

Although not a significant issue, discoloration may affect filbert kernels during certain years. It is important that each discolored kernel in the sample be cut in half to check for internal discoloration.

§51.2003 Damage...

- (d) **Discoloration when the appearance of the kernel is materially affected by black color.**

Scoring Guide

Damage: Score when kernel discoloration is black and materially affects the kernel's appearance. Kernels showing dark brown color should be disregarded.

Serious damage: Not scored as serious damage.

MIXED TYPES

Filberts are required to be “similar types.”

§51.1997 Similar type...the filberts in each container are of the same general type and appearance. For example, nuts of the round type shall not be mixed with those of the long type in the same container.

Inspectors are cautioned against scoring a mixture of varieties since it is permissible to mix varieties provided they are of the same type.

Scoring Guide

Damage: Score nuts that are distinctly of a different type, round with long or vice versa.

Serious damage: Not scored as serious damage.

MOISTURE CONTENT

Filberts are required to be “dry.”

§51.1998 Dry...the shell is free from surface moisture, and that the shells and kernels combined do not contain more than 10 percent moisture.

Individual shells, with surface moisture are scored against the total defect tolerance and if a sample contains more than the amount of moisture allowed, the lot will fail.

Note: If the sample must be sent a way for moisture testing use “Notice of Sampling” forms [SC-187](#) (intranet link). Write the word “filberts” in the space marked “Type.” Under “Remarks” state: “Sample is submitted for determination of moisture content.” Place the original copy of the sampling certificate in an envelope inside an airtight package, containing the sample, and retain other copies for billing purposes and office files.

MOLD

Generally molds occur as a secondary defect following worm injury. Kernels that are moldy following worm injury should be scored as worm injury since the tolerance for it is less than the tolerance for mold.

Mold often occurs on the tips of kernels that have been exposed to moisture entering through a split shell. In order to score mold it must be visually present on the kernel without magnification under normal lighting conditions. Mold may appear as slight whitish, gray or even pink growth in the cracks and on the ridges/tip of the kernel. Mold may also appear as hair-like strands along the length of the kernel.

Brown discolored kernels without visible growth of mold are not considered moldy. If mold is only evident on parts of the shell and not the kernel it is not considered moldy. It may be necessary to cut or break the kernel to determine if the kernel has decay or mold in the internal cavity.

§51.2007 Moldy....a visible growth of mold either on the outside or the inside of the kernel.

Scoring Guide

Serious damage: Score when there is a visible growth of mold on the outside or inside of the kernel.

Visual aids: See [FIL-3-IDENT](#).

RANCIDITY

Filberts may be held in common storage for at least a year and for longer periods in cold storage without rancidity developing.

§51.2006 Rancidity...the kernel is noticeably rancid to the taste. An oily appearance of the flesh does not necessarily indicate a rancid condition.

Kernels will be scored as rancid only if they are noticeably rancid tasting. A stale flavor or an oily appearance of the kernel does not necessarily indicate rancidity.

Scoring Guide

Serious damage: Score when noticeably rancid tasting.

Visual aid: See [FIL-4-IDENT](#).

SHAPE

Filbert shells are required to be well formed.

§51.1999 Well formed...the filbert shell is not materially misshapen.

The shape of individual nuts of one variety will vary and when two or more varieties of the same type are mixed together there may be a wide variation in shape. Inspectors should avoid becoming too technical in scoring individual nuts as misshapen unless the shell is materially deformed as in the case of doubles.

Filberts kernels are required to be “not badly misshapen.”

§51.2005 Badly misshapen...the kernel is so malformed that the appearance is materially affected.

Generally, a badly misshapen kernel will generally fill less than one-half the capacity of a shell. See the [Blanks](#) section for kernels filling less than one-fourth capacity of a shell.

Scoring Guide

Damage: Score shells that are materially deformed. Score kernels which are so malformed that the appearance is materially affected.

Serious damage: Not scored as serious damage.

Visual aid: See [FIL-CP-4](#).

SHRIVELING

Normally, shriveling is not a problem in the Barcelona (round type) but it may be a serious factor in the DuChilly (long type). Shriveling is characteristic of the DuChilly variety and is to be expected. Inspectors should not become too technical in scoring shriveling, especially on long type filberts.

§51.2003 Damage...

- (c) **Shriveling when the kernel is materially shrunken, wrinkled, leathery or tough.**

Scoring Guide

Damage: Score kernels which are materially shrunken, wrinkled, leathery or tough.

Serious damage: Not scored as serious damage.

Visual aid: See [FIL-CP-3](#).

SPLIT OR BROKEN SHELLS

Filberts are required to be free from broken or split shells.

§51.2002 Split shell....a shell having any crack which is open and conspicuous for a distance of more than one-fourth the circumference of the shell, measured in the direction of the crack.

If a shell has two or more cracks, those portions of the cracks that are open and conspicuous are to be aggregated to determine whether the combined length is greater than one-fourth the circumference. Do not apply pressure to the shell in determining whether a crack is scorable. A broken shell is one that has a portion or all of the shell missing.

Scoring Guide

Damage: Score shells having any crack which is open and conspicuous for more than one-fourth the circumference of the shell. Multiple cracks may be aggregated. Whole kernels without the shells are also considered broken.

Serious damage: Not scored as serious damage.

Visual aid: See [FIL-CP-1](#).

STAINING OF SHELLS

Usually staining is not a factor in the grading of filberts. However, occasional lots may have sufficient staining or black discoloration on the individual nut to materially affect the appearance.

§51.2003 Damage...

(a) Stains which are dark and materially affect the appearance of the individual shell.

Scoring Guide

Damage: Score only those nuts with dark or black discoloration that materially detracts from the appearance of the individual nut. Slight discolorations should be disregarded.

Serious damage: Not scored as serious damage.

DECAY

Generally decay occurs as a secondary defect following worm injury. Kernels that are decayed following worm injury should be scored as worm injury since the tolerance for it is less than the tolerance for decay.

Scoring Guide

Serious damage: Score any kernels or portions of kernels showing decomposed areas.

Visual aids: See [FIL-2-IDENT](#).

APPENDIX I – IMPORT CERTIFICATE EXAMPLE

CARRIER or LOT IDENTIFICATION		Loading		Applicant		INSPECTION CERTIFICATE	
B	1	L	4	1	5	6	WESTNUT CO.
PREFIX	NUMBER	STATE	U	L	M - EXAMPLE		
Carrier / Lot ID Stated by: BILL OF LADING		Additional Lot ID:		Shipper: DE VRY, GREENHOUSE, LTD.		Inspection Started: m m d d y y hour min. A/P	
Carrier Type / Name:		Doors: <input type="checkbox"/> On <input type="checkbox"/> Off <input type="checkbox"/> Closed		Address: CHILLIWACK, BC, CANADA		Number of Containers: 800 SACKS	
Refrigeration Unit:		Brand/Markings:		Insp. Site: APPLICANT'S WAREHOUSE		Lot ID:	
Product: FILBERTS (IN SHELL)		"NO BRAND" 50 LBS. NET, PRODUCT OF CANADA		Origin: B C		Risk	
AVERAGE DEFECTS		OFFSIZE/DEFECTS		OTHER		Y	
06	%	%	%	%	MEETS SIZE AS MARKED.		
14	%	%	%	%	OFFSIZE WITHIN TOLERANCE.		
20	%	%	%	%	MOISTURE 11.5% BY ELECTRICAL METER		
QUALITY DEFECTS (12 to 16%) CONSISTING OF:		STAINED SHELLS		1.75%			
CHECKSUM		BLANKS		7.00%			
		NOT REASONABLY WELL DEVELOPED		0.50%			
		SHRIVEL DAMAGE		2.00%			
		MOLD		1.00%			
		RANCID					
GRADE: FAILS TO GRADE U.S. NO. 1 LARGE ACCOUNT EXCESSIVE DEFECTS AND MOISTURE.		REMARKS:		FAILS TO MEET U.S. IMPORT REQUIREMENTS UNDER SECTION 8E OF THE AGRICULTURAL MARKET AGREEMENT ACT OF 1937, AS AMENDED.		ESTIMATED TOTAL	
CUSTOMS ENTRY NUMBER XXX-NNNNNN-N.		Inspector's Signature: <i>Inspector's Signature</i>		Market Office: MARKET CITY, STATE		\$ Hourly Rate	
<p>WARNING: Any person who knowingly shall falsely make, issue, alter, forge, or counterfeit this certificate or permit actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both.</p> <p>I, the undersigned, a duly authorized inspector of the United States Department of Agriculture, do hereby certify that, at the request of the applicant and on the date indicated, samples of the herein described product were inspected and the quality and/or condition as shown by said samples were as herein stated.</p>							

Inspection Instructions for Filbert/Hazelnut Kernels and Filberts in the Shell (August 2016)