



STANDARDS & GRADES

USDA grades for natural almonds are voluntary minimum standards. The California Almond industry can supply almonds to customers' unique specifications, both in terms of sizes and grades, based on the intended applications.

USDA grades establish tolerances for various quality factors. Depending on the ultimate use, different grades may be more relevant than others. Other terms like "Supreme" are also used in the industry when referring to particular grades. Be sure to speak with your supplier about your specifications.

1 U.S. ton = 0.907 metric ton
1 metric ton = 2,204.6 pounds
1 pound = 453.6 grams
10 oz. = 283.5 grams

- No limit established.
- Also included in "Other Defects."
- Includes max. 2% under 20/64 inch.
- Includes max. 5% under 20/64 inch. % also included in "Chip & Scratch."

USDA GRADES OF SHELLED ALMONDS

USDA GRADES	WHOLE KERNELS	MINIMUM DIAMETER (IN INCHES)	DISSIMILAR	DOUBLES	CHIP & SCRATCH	FOREIGN MATERIAL	PARTICLES & DUST	SPLIT & BROKEN	OTHER DEFECTS	SERIOUS DEFECTS	UNDER SIZE
U.S. FANCY	—	—	5%	3%	5%	0.05%	0.1%	1%	2%	1%	—
U.S. EXTRA NO. 1	—	—	5%	5%	5%	0.05%	0.1%	1%	4%	1.5%	—
U.S. NO. 1 (SUPREME)*	—	—	5%	15%	10%	0.05%	0.1%	1%	5%	1.5%	—
U.S. SELECT SHELLER RUN	—	—	5%	15%	20%	0.1%	0.1%	5%	3%	2%	—
U.S. STANDARD SHELLER RUN	—	—	5%	25%	35%	0.2%	0.1%	15%	3%	2%	—
U.S. NO. 1 WHOLE & BROKEN	30%	20/64 UOS†	5%	35%	x	0.2%	0.1%	x	5%	3%	5%
U.S. NO. 1 PIECES	x	8/64	x	x	x	0.2%	1%	x	5%	3%	5%

*U.S. No. 1 is commonly referred to by industry as Supreme. However, Supreme is not a USDA grade.
 †UOS = Unless Otherwise Specified.

UNDERSTANDING USDA GRADES

The different grades are defined by the allowable minimum standards/tolerances for each grade of almonds. The higher the percentage listed on the chart, the higher the tolerance for that particular grade factor.

Almonds are a natural product, so there can be variations within grades and among shipments. For example, while U.S. Fancy cannot have more than 5% dissimilar almonds, depending upon the conditions of that crop year, the actual percentage in the shipment could range from 0 to 5%.

CALCULATION OF GRADING PERCENTAGES (EXAMPLE)

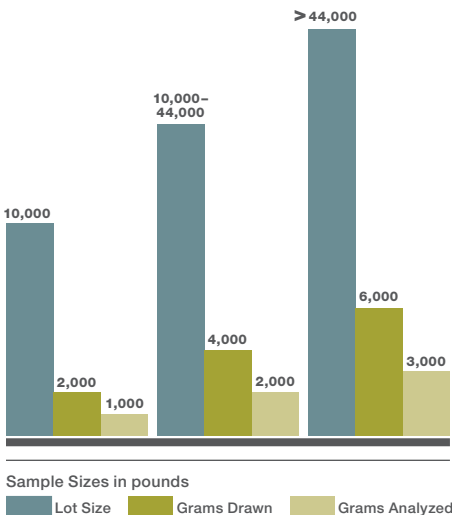
$$\% \text{ [DISSIMILAR KERNELS]} = \frac{\text{WEIGHT OF [DISSIMILAR KERNELS] (G)} \times 100}{\text{WEIGHT OF TOTAL SAMPLE (G)}}$$

USDA GRADES OF IN-SHELL ALMONDS

USDA GRADES	MEDIUM	EXTERNAL DEFECT	DISSIMILAR	UNDER SIZE	FOREIGN MATERIAL	INTERNAL (KERNEL) DEFECT
U.S. NO. 1*	28/64	10%	5%	5%	2%	10%
U.S. NO. 1 MIXED	28/64	10%	—	5%	2%	10%
U.S. NO. 2	28/64	10%	5%	5%	2%	10%
U.S. NO. 2 MIXED	28/64	10%	—	5%	2%	10%

- Includes max. 5% serious, no live insects in shell.
- Includes max. 1% less than 24/64 by weight. All others by count.
- Additional 20% for discoloration of shell.

*U.S. No. 1 is commonly referred to by industry as Supreme. However, Supreme is not a USDA grade.



UNDERSTANDING USDA SHELLLED GRADES

More rigorous specifications are typically negotiable to meet customer's application requirements.



U.S. FANCY

The highest grade—typically appropriate for products where the visual appeal of the almond is critical to the application.



U.S. EXTRA NO. 1

Similar to U.S. Fancy—ideal for food applications where the appearance of the almond is very important.



U.S. NO. 1

Sometimes referred to as Supreme, and often used for whole almond applications or for further processing like blanching and roasting.



U.S. SELECT SHELLER RUN

Mid-quality grade—good choice for applications where the almonds with minimal sorting/processing can be incorporated with other ingredients; for example, inside a confectionery product a higher level of chipped and scratched kernels is accepted. Also appropriate for further processing, such as blanching, grinding, roasting, dicing and slicing.



U.S. STANDARD SHELLER RUN

Good grade for further processing, such as blanching, dicing, grinding or paste, particularly where a higher level of split and broken kernels is not a concern.

USDA GRADING PARAMETERS

The following is the breakdown of parameters that affect the grading for almonds, regardless of the variety or size.

DISSIMILAR

Different varieties of almonds in one load. Used for whole almond applications or for further processing, such as blanching and roasting.



DOUBLES

Two kernels developing in one shell. One side of a double kernel is flat or concave.



CHIP & SCRATCH

Loss of kernel skin as a result of mechanical processing. Greater than 1/8" (3.2mm) in diameter, is defined as injury; if affecting, in aggregate, greater than 1/4" (6.4mm) in diameter, it is defined as defect.



FOREIGN MATERIAL

Pieces of shell, hulls or other foreign matter that will not pass through a round-opening screen measuring 8/64" (3.2mm) in diameter.



PARTICLES & DUST

Fragments of almond kernels or other material that will pass through a round-opening screen measuring 8/64" (3.2mm) in diameter.



SPLIT & BROKEN

Seven-eighths or less of complete whole kernels that will not pass through a round-opening screen measuring 8/64" (3.2mm) in diameter.



OTHER DEFECTS

Any defect that materially detracts from the appearance of the individual kernel or the edible or shipping quality of the almonds. The defects include gum, shrivel, brown spot and discolored.



SERIOUS DEFECTS

Any defect that makes a kernel or piece of kernel unsuitable (includes decay, rancidity, insect injury and damage by mold).



UNDERSTANDING USDA IN SHELL GRADES

U.S. NO. 1

Similar varietal characteristics. Free from loose, extraneous and foreign material.

Shells are clean, fairly bright, fairly uniform in color and free from damage caused by discoloration, adhering hulls, broken shells or other means. Kernels are well dried, free from decay, rancidity, damage caused by insects, mold, gum, skin discoloration, shriveling, brown spots or other means.

LOOSE FOREIGN MATERIAL

2%, including 1% passing through a 24/64" screen (this is also by weight).

INTERNAL DEFECTS

10%, including 5% serious damage.

U.S. NO. 1 MIXED

U.S. No. 1 grade, except that two or more varieties are mixed.

U.S. NO. 2

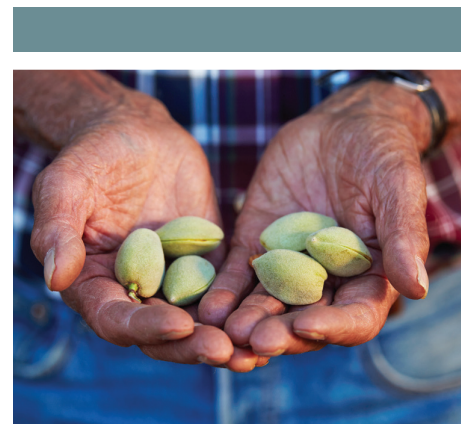
Consists of almonds in the shell that meet the requirements of U.S. No. 1 grade, except that an additional tolerance of 20% shall be allowed for almonds with shells damaged by discoloration.

U.S. NO. 2 MIXED

Consists of almonds in the shell that meet the requirements of U.S. No. 2 grade, except that two or more varieties of almonds are mixed.

SIZE

Unless otherwise specified, 28/64" in thickness.



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