Almond Chip and Scratch: Understanding the Range of Defects



Following the USDA Standards and Grades, a standardized system of almond grading helps ensure confidence in the quality and consistency of almonds purchased for various uses. Tolerances, or limits, for each parameter are set for the seven grades and summarized in the USDA grade chart.

| | 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 (SSR) | - | - | 5% | 15% | 20% | 0.1% | 0.1% | 5% | 3% | 2% | - |
| U.S. Standard Sheller Run (STD) | - | - | 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 | х | 8/64 | x | х | х | 0.2% | 1% | x | 5% | 3% | 5% |
| x 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

It's important to note that parameter tolerances for all grades are meant to be applied to the entire lot, and a composite sample shall be taken to determine the grade.

Understanding the Chip and Scratch

Chipped and Scratched kernels are usually the result of mechanical injury and damage during harvest, shelling, handling and transport. The limits of Chip and Scratch for whole kernel grades range from 5% to 35% from Fancy to Standard Sheller Run.

When the affected area on an individual kernel aggregates more than the equivalent of a circle of 3.2 millimeter (1/8") in diameter, it's graded as a mechanical injury and will be counted as Chip and Scratch for US Fancy grade only.

When the affected area on an individual kernel aggregates more than the equivalent of a circle 6.4 millimeter (1/4") in diameter, it will be considered as "mechanical damage" and counted as Chip and Scratch for U.S. Extra No. 1 or lower grade.

Any chipped and scratched areas in Double kernels are not scored as "Chip and Scratch", but as "Double".

Unscorable: Chip and scratch less than 1/8" (3.2 mm) is not scored or counted against the Chip and Scratch defect for any almond grade.







Greater than 1/8" (3.2 mm) and less than ¼" (6.4 mm) counted for Fancy grade only.

[1/8" [1/4" [1/4"]



Greater than 1/4" (6.4 mm) counted for all applicable grades.



For more information on USDA Standards and Grades, visit Almonds.com/StandardsandGrades



