

PRODUCT REFERENCE / MO

Mechanically Opened In-Shell Pistachios

A reference specification for raw in-shell pistachios opened with industrial equipment. The commercial lot must be confirmed against the buyer's destination and application requirements.

REFERENCE STATUS

Values in this sheet are adapted from the supplied third-party technical reference. They are not a Certificate of Analysis or a guaranteed PEZTEH production specification. Final grade, tolerances, treatment, packing, shelf life and legal limits must be confirmed in the signed commercial specification and current lot documents.

Product profile

Product form	Raw in-shell pistachios, mechanically opened
Varieties / shape	Jumbo round, regular round, jumbo long, medium long, regular long
Caliber	21/26, 26/30 and 30/34 fruits per ounce
Sensory	Crunchy; typical pistachio flavor; free from off-taste and foreign odor
Process reference	Industrial mechanical opening; no hand cracking, water sinking or ice cracking
Source shelf-life reference	18 months after packing; target storage 5-15 C and 55% RH

Reference grade tolerances

Factor (% by weight unless stated)	IR No.1	IR No.2
Open mouth	95	93
Closed shell	5	7
Adhering hull	2	2
Stained	7	10
Out of caliber	20	30
Midgets	3	5
Mechanical damage	8	12
Discoloration	10	15
Dissimilar varieties	10	20
Edible meat	>47	>42
Damaged kernels	3	7
Serious damage	2	3

Factor (% by weight unless stated)	IR No.1	IR No.2
Maximum insect damage	1	2
Roasted / overheated kernel	3	5
Total internal defects	5	10
Shell pieces and blanks	3	5
Loose kernels	3	5
Foreign material	0.05	0.05
Moisture	4-7	4-7

Aflatoxin B1 and Total Aflatoxin: according to the agreed customer specification and current destination requirements.

Defect definitions

1. **Closed shell** - A tightly closed nut where a human nail cannot enter the suture.
2. **Adhering hull** - Hull material covering more than one-quarter of the shell surface in aggregate.
3. **Stained** - Contrasting yellow, dark brown or black discoloration affecting more than one-quarter of the shell surface.
4. **Out of caliber** - The aggregate proportion of oversized and undersized pistachios relative to the declared lot caliber.
5. **Midgets** - In-shell pistachios passing through a 10 mm round-hole screen.
6. **Mechanical damage** - Nuts split against their natural suture.
7. **Discoloration** - Light or dark grey shell color contrasting with ordinary shell color; a natural appearance factor rather than an automatic quality failure.
8. **Dissimilar varieties** - The proportion of other varieties in the principal variety of the lot.
9. **Edible meat** - Aggregate kernel weight in a 100 g in-shell sample.
10. **Damaged** - Immature or underfilled kernels, or kernel spotting covering more than one-eighth of the surface.
11. **Serious damage** - Visible insect evidence, mold, distinct rancidity or decay affecting at least one-sixteenth of the kernel surface.
12. **Roasted / overheated** - Kernels cooked by excess heat and browned internally.
13. **Total internal defects** - The combined percentage of damaged and seriously damaged kernels.
14. **Shell pieces and blanks** - Open or half shells containing no kernel.
15. **Loose kernels** - Kernels without shell.
16. **Foreign material** - Material other than pistachio shells or kernels. Glass, metal and live insects are not permitted.
17. **Off-taste and foreign odor** - Any flavor or odor not typical of pistachios, assessed by trained personnel.