Optimal Fresh

The fruit, vegetable and fresh produce expert system

Detailed Report **Printed on** Wednesday, 19 December 2001

Crop peanuts

Maturity stage Shelled
Category Nuts
Plant Part Nut
Usage Roasted
Botanical name *Arachis hypogaea* L.
Botanical family Fabaceae (Leguminosae)

Picture source: Corel, 1998

Alternate names include

(C) hua sheng
(E) groundnut
(E) peanuts
(F) arachide
(F) cacahuète
(G) Erdnuß
(J-K) E]7]OR
(J-R) nankinmame
(S) cacahuete
(S) maní

Refrigerated Container/Coolroom Recommendations

Optimum product storage temperature 0.0 to 0.0°C

Temperature set point **0.5°C**
Add a margin for uncertainty in equipment performance if necessary.
For return air control set point add 1°C to delivery set point.

Ventilation (air exchange) settings for containers: 6 m (20') = **-**
12 m (40') = **-**

Acceptable product temperature at loading into container **0.0 to 5.0°C**

Key Properties

Storage time (days)†	**Humidity (% RH)**	Freezing point (°C)	Storage time at ambient (~20°C)	Ventilation rate
360 - 360	**60 - 70**	-	-	-

† at optimum storage temperature

Other Properties

Ref	Maturity stage	Air exchange *	Freezing Point (°C)	Ethylene production **	Ethylene sensitivity	Ice compat-ibility	Water loss ***	% Water content	Bruising suscept-ibility
1	General		0					6.5	Very Low

* Air exchange rates: Nil = 0%; Very low = 25%; Low = 50%; Medium = 100%; High = 200%; Very high = 400% fresh air/hour.

** Ethylene production rates at 20°C: Nil = 0 nM; Very low = <4 nM; Low = 4 - 40 nM; Medium = 40 - 400 nM; High = 400 - 4000 nM; Very high =>4000 nM ethylene/kg/hour.

*** Where % weight loss/week is given this is converted as: Low <= 1%; Medium = 1.1 - 3.4%; High = >3.5%

Controlled Atmosphere

Ref	Maturity stage	% O2		% CO2		Temp°C		Benefit of controlled atmosphere
		min	max	min	max	min	max	
1	Shelled	0	0.5			0	5	Excellent

Reference notes

1 Vacuum packed

Compatibility in Mixed Storage

Temperature compatibility group

0	7	13	20

Humidity compatibility group

Dry 60-80%	Moderate 80-90%	High 90-95%	Very high 95-100%

Not compatible with crops that:
Odours will be absorbed by:
Absorbs odours from:

References for peanuts

Values quoted in Detailed Report are taken from a compilation of the best set of figures from all references. This best set of figures is always referred to as Reference 1.

See Reference Report for full listing of all values, original references and alternate names.