

Controlled atmosphere treatments: altered pressure

The [high-risk plant products](#) must be:

- treated offshore using a controlled atmosphere treatment at one of the rates in Table 3
- accompanied by a controlled atmosphere treatment certificate
- accompanied by a phytosanitary certificate
- accompanied by an [import permit](#). Please include the following details in your permit application:
 - controlled atmosphere treatment rate that will be used
 - name and contact details of the treatment provider
 - details of any government registration or approvals to treat goods for export
 - type/brand of controlled atmosphere treatment system
 - how the plant products are packaged for treatment.

Table 3: Controlled Atmosphere Treatments: Altered pressure rates

Temperature	Concentration	Pressure	Minimum Exposure period
20°C or above	Carbon dioxide (CO ₂) - 95% or above	20 bar or above	5 hours
20°C or above	Carbon dioxide (CO ₂) - 95% or above	30 bar or above	3 hours

Notes: The temperature must be for the enclosure and the products.

Packaging requirements for an effective treatment

To ensure the treatment effectively treats the products, the products must be treated either:

- in gas permeable packaging; OR
- prior to being packaged; OR
- with any impermeable packaging open during fumigation.

Examples of gas **permeable** packaging include:

- woven fabrics and plastics that are not lined/laminated with impermeable materials

- dry cloth
- perforated plastics or cellophane that meet the perforation requirements of the [Controlled Atmosphere Treatment Methodology](#)
- paper and cardboard that is not waxed, lined, laminated or painted.

Examples of **non-permeable** packaging include:

- solid plastic or cellophane (including sheets, bags, pouches, films, wraps)
- woven fabrics and plastics that are lined, coated or laminated with impermeable materials
- paper and cardboard that is waxed, lined, laminated, or painted
- sealed pouches, tins and cans
- sealed glass jars and bottles.

See our packaging suitability guide for more information: [Guide to packaging suitability for performing QPS treatments](#).

Controlled atmosphere treatments: Controlled Atmosphere

Treatments: Atmospheric pressure

The [high-risk plant products](#) must be:

- treated offshore using a controlled atmosphere treatment at one of the rates in Table 4
- accompanied by a controlled atmosphere treatment certificate
- accompanied by a phytosanitary certificate
- accompanied by an [import permit](#). Please include the following details in your permit application:
 - controlled atmosphere treatment rate that will be used
 - name and contact details of the treatment provider
 - details of any government registration or approvals to treat goods for export
 - type/brand of controlled atmosphere treatment system
 - how the plant products are packaged for treatment.

The treatment and the treatment certificate must meet the requirements of the [Controlled Atmosphere Treatment Methodology](#).

Table 4: Controlled Atmosphere Treatments: Atmospheric pressure rates

Temperature	Concentration	Pressure	Minimum Exposure period
25°C or above	Carbon dioxide (CO ₂) -	Normal	28 consecutive

Temperature	Concentration	Pressure	Minimum Exposure period
	80% or above	atmospheric pressure	days (672 hours)
Greater than or equal to 25°C and less than 28°C	Oxygen (O ₂) - 1% or less	Normal atmospheric pressure	22 consecutive days (528 hours)
28°C or above	Oxygen (O ₂) - 1% or less	Normal atmospheric pressure	12 consecutive days (288 hours)

Notes: The temperature must be for the enclosure and the products.

Packaging requirements for an effective treatment

To ensure the treatment effectively treats the products, the products must be treated either:

- in gas permeable packaging; OR
- prior to being packaged; OR
- with any impermeable packaging open during fumigation.

Examples of gas **permeable** packaging include:

- woven fabrics and plastics that are not lined/laminated with impermeable materials
- dry cloth
- perforated plastics or cellophane that meet the perforation requirements of the [Controlled Atmosphere Treatment Methodology](#)
- paper and cardboard that is not waxed, lined, laminated or painted.

Examples of **non-permeable** packaging include:

- solid plastic or cellophane (including sheets, bags, pouches, films, wraps)
- woven fabrics and plastics that are lined, coated or laminated with impermeable materials
- paper and cardboard that is waxed, lined, laminated, or painted
- sealed pouches, tins and cans
- sealed glass jars and bottles.

See our packaging suitability guide for more information: [Guide to packaging suitability for performing QPS treatments](#).