

Food grade packaging

As packaging and containers used to store food are in direct contact with the food, they need to be suitable and 'food grade'. If the packaging is made from inappropriate materials, it could make the food unsafe.

Packaging must be suitable for its intended use

The Food Standards Code details specific requirements for surfaces in contact with foods, including containers and packaging in which food is processed or stored. They must be:

- adequate for the production of safe and suitable food
- fit for their intended use.

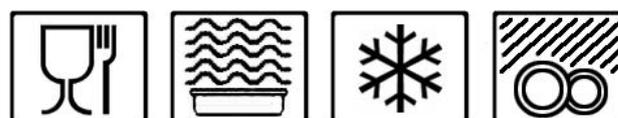
For a food contact surface to be considered food grade it must be able to be effectively cleaned, and must be made from a material that will not migrate into, contaminate or taint the food. The requirements for a plastic to be considered food grade are listed in the Australian Standard for Plastics materials for food contact use (AS 2070-1999).

This Standard applies to manufacturers of plastics materials for food contact and specifies procedures to be used during the various stages of production. The requirements apply to such items as packages, domestic containers, wrapping materials, utensils or any other plastics items intended to come into contact with food.

The Food Standards Code also specifies the maximum allowable levels in foods for certain compounds commonly used in making food packaging (such as tin in canned foods, acrylonitrile and vinyl chloride – used in the production of plastics – in any food).

The US Food & Drug Administration (FDA) maintains a database listing the approved food contact substances that have been demonstrated to be safe for their intended use.

Most containers will outline on the label whether or not it is food grade and what it is suitable for (such as the labels below). If no such indication is made on the label or you are unsure whether or not the container is food grade, either contact the manufacturer or assume the container is not food grade.



Cup & Fork
indicates
this plastic
is safe for
contact
with food.

**Radiation
Waves**
indicates
this plastic
is safe for
microwave.

Snowflake
indicates
this plastic
is safe for
use in the
freezer.

**Dishes in
Water**
indicates
this plastic
is safe for
dishwasher
top rack.

Figure 1 The meaning of label images.

Cleaning

Any surface that comes into contact with food must be able to be easily and effectively cleaned and, where necessary, sanitised.

Any container or packaging used to store food should be smooth, and free of cracks, chips, crevices, ridges or grooves that could harbour bacteria and hinder attempts to easily and effectively clean it. Any defects in a food contact surface can allow the build-up of food scraps, and harbour bacteria which can contaminate the food.

Suitable packaging materials

Food contact surfaces must be made of material that will not contaminate food and are impervious to grease, food particles and water.

Containers and packaging must be made from materials that will not contaminate food by allowing chemicals to migrate from the packaging into the food, or by giving the food an unacceptable taste or odour.

Some materials are not suitable for use with acidic foods. Examples include:

- lead in ceramic, china and crystal utensils, solders/flux (flowing agents) and pewter
- galvanised metal
- copper and copper alloys
- unglazed earthenware is unsuitable for eating and drinking utensils.

The material used in food packaging must be able to withstand the uses it would normally be exposed to, such as microwaving, or storing hot food or frozen food.

Containers and packaging made specifically for food contact use are recommended because they are made from suitable materials tested for contact with food, and are usually designed for easier cleaning and sanitising.

Reuse of containers

Containers that have been used as packaging for food must not be reused unless they can be properly cleaned and, if necessary, sanitised to prevent cross contamination.

Some food grade containers, such as ice cream containers, may be suitable for reuse on a short-term basis, but they are not ideal. The number of times these containers can be safely reused is limited by how well they retain their properties after being washed in hot water and detergent. With constant reuse the containers may become brittle and crack. This increases the risk of the container breaking and contaminating the food. Brittle containers are not considered suitable and should be discarded.

Where jars and lids are reused, they should be:

- inspected prior to use (and reuse) and discarded if they have damaged seals, or are cracked or soiled with anything likely to taint or contaminate food (such as any non-food chemicals)
 - thoroughly cleaned so that no residue is left on the jars and lids (a dedicated automatic glassware washer would be ideal, but careful washing by hand may also be effective).
 - thoroughly sanitised (this might not be required if the food products are to be hot-filled at or above 85°C).
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Single use items are not to be reused

The Food Standards Code specifically prohibits the reuse of single use items in contact with food. Single use items are generally defined as those where the manufacturer of the item intends for it to be only used once in connection with food handling (such as plastic takeaway containers). There may be other non-food contact uses where these containers can be reused.

Outer containers

Outer containers are sometimes used to exclude pests from an opened package of food, such as bags of flour. These outer containers need to protect the food from contamination and include a tight-fitting lid. Although outer containers may not directly be in contact with food, they still must be suitable for their intended use and able to be easily cleaned. A rubbish bin would not be considered suitable for this purpose.

More information

- Visit [foodauthority.nsw.gov.au](https://www.foodauthority.nsw.gov.au)
- Email the Food Authority helpline at food.contact@dpi.nsw.gov.au
- Phone the Food Authority helpline on 1300 552 406
- Refer to [Safe Food Australia – A guide to the Food Safety Standards](https://www.foodstandards.gov.au) on the FSANZ website at [foodstandards.gov.au](https://www.foodstandards.gov.au)

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