

# DEFINITION OF PLASTIC

## PROHIBITED PLASTIC PRODUCTS

### SOUTH AUSTRALIA'S SINGLE-USE AND OTHER PLASTIC PRODUCTS LEGISLATION

South Australia's Single-use and Other Plastic Products (Waste Avoidance) Act 2020 prohibits the sale, supply or distribution of both fossil fuel derived plastic and plant-based plastics. This means that bioplastic products, including compostable plastic products, are not suitable alternatives to single-use plastic straws, cutlery and stirrers and are banned from 1 March 2021. However, bioplastics may be suitable for other products and applications.

#### DEFINITIONS

##### **How is plastic defined in the legislation?**

The legislation defines plastic as a: 'material made from, or comprising, organic polymers whether plant extracts or of fossil fuel origin'.

##### **What does the term 'plant extracts' refer to?**

Plant extracts refer to products that have been made in whole, or in part, from biomass (plants). Commonly used forms of biomass are corn and sugarcane. Plant-based plastics include those that are:

- Compostable and biodegradable
- Biodegradable but not compostable
- Made from biomass but not biodegradable

See the following websites for further information:

- Australian Academy of Science  
<https://www.science.org.au/curious/earth-environment/future-plastics>
- Australasian Bioplastics Association  
<https://bioplastics.org.au/resources/faq/#toggle-id-13>

##### **How is the term compostable defined?**

The term compostable refers to a subset of biodegradable plastic. Compostable plastics are generally made from plant material that return to base organic components when processed under certain conditions such as those provided in a commercial composting environment.

*Source: Green Industries SA*

##### **How is the term biodegradable defined?**

Something is biodegradable when living things, such as fungi or bacteria can break it down. Biodegradable plastics are made from plant-based materials such as corn and wheat starch rather than petroleum and break down into organic material and water over time and under certain conditions e.g. temperatures above 50°C.

*Source: Green Industries SA*

## EXAMPLES

### What are examples of non-biodegradable bioplastic?

- Bio-polyethylene (PE)
- Bio-polypropylene (PP)
- Bio-polyethylene terephthalate (PET)

### What are examples of compostable plastic?

- Polylactic acid (PLA)
- Crystallised polylactic acid (CPLA)
- Polyhydroxyalkanoates (PHA)
- Polybutylene succinate (PBS)

Compostable single-use plastic straws, cutlery and stirrers are classed as 'prohibited plastic products' irrespective of whether these items are certified compostable (to a home composting or industrial composting standard) or not.

## IMPORTANT INFORMATION FOR SUPPLIERS AND RETAILERS

### Why are compostable plastic straws, cutlery and beverage stirrers prohibited?

While certified compostable plastic products can break down in industrial, and potentially home, composting systems, they can cause litter, pollution and harm to wildlife, including marine life, in the same way as conventional, fossil fuel-derived plastic products when not composted.

### What standards would indicate that my product is made from or contains compostable plastic?

Examples of composting certification are:

- **Australian Standard** for Home Composting (AS 5810)
- **Australian Standard** for Commercial Composting (AS 4736)



- **European Standard** for Commercial Composting (EN 13432)
- **North American Standard** for Commercial Composting (ASTM D6400)
- **TÜV Austria Standard** - OK compost home certification
- **TÜV Austria Standard** - OK compost industrial certification
- **DIN-Geprüft** (German) Standard for Commercial Composting



## **Can businesses sell, supply or distribute compostable straws, cutlery and stirrers that are lined or coated with bioplastic from 1 March 2021?**

No - the legislation prohibits products made from or comprising fossil fuel-derived plastic and plantbased plastic. This means that items lined with or containing even a small percentage of bioplastic are prohibited products.

An exemption applies for single-use plastic drinking straws for disability or medical needs. Further information on the exemption can be found [here](#).

Please note that compostable straws may not be suitable in certain circumstances and that flexible, bendable plastic straws may be required.

### **How can I tell if my product is a prohibited product or not?**

Contact your supplier for product information. Questions you may want to ask are:

- Is the product certified to a commercial composting standard?
- this type of standard is only assigned to bioplastic products, and can therefore indicate whether a product is a prohibited item or not.
- What glues, if any, or additives, if any, does this product contain?
- Is the product lined or coated with bioplastic or fossil fuel-derived plastic?

If you are still unsure whether your product is a prohibited item or not, contact [sup@sa.gov.au](mailto:sup@sa.gov.au).

## **OTHER BIOPLASTIC PRODUCTS**

### **I sell, supply or distribute bowls, plates, cups, takeaway containers and lids that are made from, or comprising, bioplastic. Can I still sell these items from 1 March 2021?**

Yes – the legislation does not currently cover these items.

South Australia's legislation enables extra single-use and other plastic products to be added to the list of prohibited plastic products in the future, subject to consultation and consideration of other information such as whether any potential exemptions may be required. This could include whether there are suitable compostable plastic alternatives to the products proposed to be added to the list of prohibited plastic products.

Register to receive updates on the legislation by completing the form on the 'Replace the Waste' website homepage.

## **SUGARCANE PRODUCTS**

### **If I sell products that are made from sugarcane, does this mean that these products are prohibited?**

Not necessarily – sugarcane products come in two forms:

- as bioplastic derived from sugarcane; and
- as sugarcane pulp (also referred to as bagasse), which resembles cardboard.

Fibre products, including products made with sugarcane pulp, are not classed as 'prohibited plastic products', unless they are lined with plant-based or fossil fuel-derived plastic. It is recommended that businesses check with their suppliers before purchasing products made from sugarcane to ensure that they are not unintentionally purchasing bioplastic products.

## **ALTERNATIVES TO PROHIBITED PRODUCTS**

### **What are acceptable alternatives to single-use plastic drinking straws?**

Examples of alternatives include:

- For single-use\*:
  - Paper straws
  - Fibre straws (i.e. wheat and rye)
  - Pasta straws
- For multiple uses:
  - Bamboo straws
  - Stainless steel straws
  - Glass straws
  - Silicone straws
  - Reusable plastic straws (see the Environment Protection Authority's guideline for assessing single-use versus reusability).

\*Note: These items must not be lined with plastic.

An exemption allows for the continued sale, supply and distribution of individual single-use plastic drinking straws for disability or medical needs and packs of straws for disability or medical needs at prescribed businesses, such as pharmacies.

See: <https://www.replacethewaste.sa.gov.au/exemptions-update>.

### **What are acceptable alternatives to single-use plastic beverage stirrers?**

Examples of alternatives include:

- For single-use: wooden drink stirrers
- For multiple uses: stainless steel drink stirrer

### **What are acceptable alternatives to single-use plastic cutlery?**

Examples of alternatives include:

- For single-use:\* wooden  
Common materials used to make disposable wooden cutlery include:
    - Aspen – chopsticks
    - Birchwood – forks/knives/spoons and chopsticks
    - Bamboo – forks/knives/spoons and chopsticks
    - Pine - forks/knives/spoons and chopsticks
- \*These items must not be lined with plastic.
- For multiple uses:
    - Metal
    - Reusable wooden
    - Reusable plastic (see the Environment Protection Authority's guideline for assessing single-use versus reusability).

Further information visit: [www.replacethewaste.sa.gov.au](http://www.replacethewaste.sa.gov.au)

For a copy of a list of suppliers of alternatives, please email Green Industries SA at [sup@sa.gov.au](mailto:sup@sa.gov.au)