



Victorian School Canteen Association

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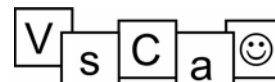
VSCA Canteen Services

PO Box 1035, Box Hill, Vic 3128

Phone: 03 9890 4203 Fax: 03 9890 1601

Email: vsca@bigblue.net.au

Web: www.vsca.org.au



VSCA Canteen Services Pty Ltd

ABN 20 062 392 983

VSCA “ENVIRO FRIENDLIER” FOOD PACKAGING

Helping you to “green” your canteen!

All of the items mentioned here are available to order directly from VSCA.
Please contact VSCA for more information.

(A) OPTIONS: ENVIRO FRIENDLIER CHOICES FOR FOOD PACKAGING

Use	Enviro Friendlier Choices See over for detailed descriptions of these materials ^{1,2,3,4,5,6,7,8,9,10,11}
Cups for cold drinks	* Clear PLA ¹ cups * Bamboo ² cups
Clear containers with or without lids for cold food (eg. yoghurt, salads, fruit salad, sushi, icecream, etc)	* Clear PLA ¹ containers with or without lids
Cups for hot drinks	* PLA coated paper cups ³
Plates and bowls for hot foods	* Sugarcane fibre ⁴ plates & bowls * Bambooware ² plates & bowls * Areca palm sheath ⁵ plates & bowls
Containers with or without lids for hot foods (to be served hot, or to reheat in container)	* Sugarcane fibre ⁴ containers with or without lids * EATware fibre ⁶ bowls & food boxes with or without lids
Cutlery	* Cornstarch ⁷ cutlery * Bamboo ² cutlery * Wooden ⁸ cutlery
Straws	* PLA ¹ straws * Wax coated paper straws
Cling wrap	* Bio-cling wrap ⁹
Clear bags for covering, wrapping or holding cold or hot foods (eg. muffins, snacks, cheese & biscuits, fruit or vegetable pieces, popcorn, dried fruits and nuts, etc)	* Cellophane bags ¹⁰ * Pixie packaging ¹⁰
Paper packaging	* 100% post-consumer recycled paper ¹¹ * Brown paper (unbleached) bags
Serviettes	* Recycled paper serviettes

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(B) INFORMATION: ENVIRO FRIENDLIER PACKAGING MATERIALS

1. PLA (polylactic acid)

Uses:

PLA cups, containers and straws have the same look and feel as petroleum based plastics. They are clear, colourless and transparent and can be substituted for standard plastic cups, containers and straws. PLA packaging can be used for **cold foods and drinks** (up to 48°C) and **can be frozen**. It is NOT suitable to use for hot food or drinks.

How is it produced?

Polylactic acid (PLA) is a biodegradable polymer derived from annually renewable plant resources. It is a sustainable alternative to petrochemical derived plastic products. PLA is not a new product. It was discovered in the 1890's, but is only now finding usage in biodegradable packaging. Although more expensive than many petroleum-derived plastics, its price is falling as production increases.

PLA is produced from renewable agricultural by-products such as corn, maize, wheat and sugar. Through a process of bacterial fermentation, the carbon stored in these starch plants and other elements in these plants are made into a natural bioplastic.

PLA is used for the production of bioplastic, food packaging, compost bags, loose-fill packaging, disposable tableware etc. It is also used in a number of biomedical applications eg sutures, dialysis media and drug delivery devices.

Conventional standard plastics are produced from petrochemicals and are not sustainable and not compostable. Packaging made from PLA is biodegradable and reverts in less than 60 days in ideal conditions (ie. in a commercial composting facility) back into plant matter. If home composted, it will still biodegrade but will take longer. PLA does not leach chemicals into the food or liquid it holds or into the ground in a landfill environment (crude oil based plastic does).

Product Range:



PLA Cold Drink Cups

- * 200ml cup - water dispenser size (on left)
[Suitable to use as yoghurt cup with suitable flat lid]
- * 100ml tasting cup (on right)



PLA Cold Drink Cups

- * 500ml cup (on left)
 - * 360ml cup (on right)
- Flat or dome lids available



PLA Lids for 360ml and 500ml cup

- * Flat or dome shape with straw hole perforation



PLA Containers with or without lid

- * 140ml / 75x47mm
- * 360ml / 123x50mm
- * 500ml / 123x70mm
- * 700ml / 145x70mm

Lids to suit sold separately

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PLA Containers with or without lids

Top to bottom:

- * 140ml
- * 360ml
- * 500ml
- * 700ml



PLA Sushi Boxes with click down lids

Top to bottom:

- * Small 140x90x35mm
- * Medium 172x100x35mm
- * Large 190x126x40mm

Other items also available, including PLA Strawberry Punnets. Please contact VSCA for more information.

2. Bamboo

Uses:

Bambooware plates, bowls, cups and cutlery are attractive and functional. They look more natural and classier than sugarcane fibre products (see 4. below). Each piece is different! Bambooware can be brittle. Depending on usage, breakage may be a problem. It can be **used just once or may be washed and reused many times** (it is dishwasher proof). The wear on the product depends on the type of food that is being served on it.

How is it produced?

Bambooware comes from Chinese wildcrafted bamboo. It is a fast growing and renewable resource with growth stimulated by pruning. It requires little water and no pesticides or fertilisers. This means that there is no permanent depletion of this remarkable resource when cultivated and used correctly. Bamboo plays an important role in the reduction of timber consumption, environmental degradation and forest protection.

To produce these products, the bamboo is harvested, pulverised, mixed with water, moulded and then heat blasted to set the required shape. Bambooware contains no synthetic materials, plasticisers or dioxins. It is 100% biodegradable and reverts back to plant matter. Generally, decomposition will take 4-6 months

Product Range:



Bamboo cup 280ml



Bamboo bowl 180mm (600ml)



Bamboo plates

- * Large round or square 240mm; 225mm
- * Small square 165mm
- * Rectangular 230 x 150mm
- * Platter 550 x 350mm



Bamboo cutlery: Knife, Spoon, Fork
(Each item 16 cm long)



Bamboo Cocktail Forks
(90mm long)

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3. PLA Coated Paper Cups

Uses:

These products are basically identical in function and form to standard plastic coated paper disposable cups - BUT PLA coated paper cups are 100% biodegradable and fully compostable. These products are **suitable for hot and cold drinks**. They are available in sleeves of 50 cups or in boxes of 1000 cups.

How is it produced?

These products are made from fully renewable resources. The fibre used meets Sustainable Forestry Initiative Standards. The cups have corn based PLA lining.

Product Range:



PLA Lined Paper Cups

Right to left:

- * 8 oz (240ml)
- * 12 oz (360ml)
- * 16 oz (500ml)

4. Sugarcane Fibre (Bagasse)

Uses:

Sugarcane fibre tableware is the cheapest, most affordable, eco friendly packaging option that is most similar to standard paper or plastic plates. Sugarcane fibre tableware is uncoated (ie. no plastic) BUT it is still **suitable for both hot and cold foods and drinks**. It is oil and water resistant, and is freezer & microwave safe. It is suitable for single use.

How is it produced?

Conventional paper products are made from woodchips. Many conventional paper products have a plastic coating. Sugarcane fibre tableware is made from sugarcane residue fibre or "bagasse" after juice extraction. This recycles the waste fibre left after sugar is removed from the cane and this waste would otherwise be discarded. Sugarcane is an annual, readily renewable and sustainable resource which, like any plant while growing, absorbs carbon dioxide from the atmosphere. It contains no additives, no plastic coating and is "tree free" and is truly an eco friendly product. It is fully compostable in 30-90 days.

Sugarcane fibre tableware is bleached by oxygen only using an Elemental Chlorine Free (ECF) process. Some items are also available unbleached to further reduce impact on the environment.

Product Range:



Bagasse Round Plates (Sugarcane fibre)

- * 160mm / 6"
- * 180mm / 7"
- * 230mm / 9"
- * 260mm / 10"



Bagasse Oval Plates (Sugarcane fibre)

- * Small / 233x165x25mm (unbleached)
- * Medium / 265x200x21mm
- * Large / 318x258mm

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Bagasse Bowls (Sugarcane fibre)

- * 400ml / 160x35mm
- * 680ml / 190x40mm
- * 1000ml / 205x60mm (unbleached)



Bagasse Round Containers with lids (Sugarcane fibre)

- Unbleached
- * 500ml
- * 650ml



Bagasse Cups (Sugarcane fibre)

- * 260ml / 8oz
- Flat and travel lids available



Bagasse Burger Box (Sugarcane fibre)

- Unbleached
- * 5" with lid (125x125x70mm)



Bagasse Lunch Box (Sugarcane fibre)

- * 850ml with lid



Bagasse Compartment Lunch Boxes (Sugarcane fibre)

- Unbleached
- * 800ml
- * 1000ml



Bagasse Lunch Box (Sugarcane fibre)

- Unbleached
- * 850ml with lid



Bagasse Containers with hinged lids (Sugarcane fibre)

- * Small 600ml / 175x130x52mm
- * Large 850ml / 185x135x70mm

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5. Areca palm sheath

Uses:

Areca palm sheath items are perfect for every occasion and are available in a range of shapes and sizes. They are sturdy but lightweight, and are suitable for hot and cold food. They are oil and water resistant, hygienic and suitable for oven and microwave. They are 100% natural, chemical free, 100% biodegradable and compostable. They look more natural and are classier than sugarcane fibre products (see 4. above). Areca palm sheath plates are designed for single use.

How is it produced?

These products are made from naturally fallen Areca palm leaf sheaths.

Product Range:



Round Plates (Palm Leaf)

- * 240mm round - the all round dinner and party plate
- * 180mm round - for salad and side dishes
- * 120mm mini round - for dips and sauces



Round & Oval Bowls (Palm Leaf)

- * 180mm bowl - great for muesli, salads and desserts
- * 180mm oval - for salads and the small side dish
- * 120mm mini round - for dips and sauces



Square Plates (Palm Leaf)

Good commercial size serving plates

- * 240mm large square
- * 180mm small square
- * 160 x 240mm rectangle



Hexagonal Plates (Palm Leaf)

- * 240mm large hexagon (dinner plate with a difference)
- * 180mm small hexagon (for salad and side dishes)
- * 120mm mini hexagon (for dips and sauces)

6. EATware fibre

Uses:

EATware packaging is resistant to oil and water, even at high temperature. It is **safe for microwave ovens and is safe for hot water**. It is **suitable for refrigeration** - juicy foods can be refrigerated for at least 3 days. It is suitable for freezers - dry foods will last for up to 3 months. It is easily disposable - recyclable and compostable.

How is it produced?

EATware is produced by a unique patented mechanical pulping system that uses mechanical action instead of chemicals to extract cellulose fibres from agricultural residues or plants with short life cycles like sugar cane or bamboo. Chlorine and sulphur free, this system causes minimal environmental hazard. It also minimises costs by eliminating pollution charges and the need for expensive chemicals. EATware is biodegradable and compostable (to European EN13432 standard).

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7. Cornstarch/Plastarch Material (PSM)

Uses:

Cornstarch cutlery is an environmentally friendly disposable product. It is the very best and cheapest alternative to plastic cutlery that has so far come onto the market, and is the solution for everyday commercial catering and takeaway applications. A light material with a modern design and a quality smooth finish, it is also **strong and flexible**. It can cut a steak without breaking. It is **heat resistant to 130 C**, is **microwavable**, and is **oil and water resistant**. It can be **washed and reused many times**.

How is it produced?

Cornstarch cutlery is made from a fully biodegradable plant based polymer (derived from GM-free starch) and chalk. The manufacturing process is clean - no waste water, no effluent gas and no waste residue are discharged. Its performance is similar to conventional thermoplastics. However - unlike conventional thermoplastics - cornstarch cutlery, being based on plant material, is completely biodegradable in a biologically active environment. The rate of biodegradation depends on the size and shape of the article but is similar to the one usually reached by organic waste when composted in a commercial composting facility. If home composted, it will still biodegrade but will take longer. PSM holds international certificates for biodegradability and compostability.



Cornstarch Cutlery

Left to right:

160mm fork

153mm fork

153mm knife

160mm soup spoon

153mm spoon

Cornstarch bags:

Made from a plant starch based polymer, these are available as carry bags, compost and bin liner bags. The film has a biodegradation time of 20-45 days in commercial or home composting conditions and breaks down into water, carbon dioxide and biomass (plant matter). Bags comply with ASTM D6400-99, DIN 45900 and OK Compost standards for biodegradability and compostability. Available in 10, 20, 30, 70 and 240 litre sizes.

8. Wooden cutlery

Uses:

A sustainable replacement for plastic cutlery. Perfect for the event where looks are a priority.

How is it produced?

It is made from plantation birch.

Product Range:



Wooden Cutlery

Also available: **Wooden Stirrers** (140mm long) - suitable for use as stirrers or as icy pole sticks.



Wooden Chopsticks

9. Bio-cling wrap

Uses:

Bio-cling wrap is excellent for maintaining the freshness of a wide range of food products. It is available in a 40 cm x 300 metre roll. It stretches out to 200% of its length.

How is it produced?

Bio-cling wrap is biodegradable and breathable and is environmentally friendly. It is made from polyester urethane. It contains no plasticisers or additives. It degrades in sunlight and moisture and is consumed by micro-organisms found in the soil. No dioxins are released if it is incinerated. It is approved by the USA FDA and SGS for food contact. It is currently undergoing certification for European EN13432 compostability standards. Until this is completed, it cannot be promoted as being "compostable".

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10. Cellophane bags

Uses:

Cellophane bags are suitable for many food packaging applications eg. muffins, bakery items, snacks, cheese & biscuits, fruit or vegetable pieces, popcorn, dried fruits and nuts, etc.

How is it produced?

Cellophane is produced from paper that is manufactured from plantation timber. It is fully recyclable and biodegradable. It is clear and provides good visual presentation of food items. It protects food from contamination and helps to keep items fresh. It is ideal for packaging food for sale.

Product range:

Different sized bags with or without gussets.

11. Paper packaging

How is 100% post-consumer recycled paper produced?

“Post-consumer” recycled paper means that these products are made from material that has been used at least once as a paper product, and then recycled. This is the best and most sustainable form of paper product to use because it uses and creates a demand for scrap paper that often otherwise ends up in landfill. No trees are cut down to make this paper.

On the other hand, while still a good second option, “recycled paper” is made from off-cuts that have been diverted from the waste stream during the original paper manufacturing process, not from our recycled paper waste.

Brown paper bags are preferable to white paper bags

Brown paper bags are “unbleached” and are more environmentally friendly than white paper bags. During manufacture, white paper bags are bleached using chlorine or other chemicals that creates pollution.

Greaseproof paper

Greaseproof paper is recyclable and is produced from plantation timber. It is ideal for wrapping items that are going to be consumed on the same day. Greaseproof squares (instead of paper bags) can be used for serving items at the counter. Greaseproof paper can be composted or used in worm farms. It is a better choice than plastic film wrap that cannot be recycled and is not biodegradable.

12. Take positive steps - avoid items that cannot be recycled

Avoid these items because they are not recyclable:

- * polystyrene cups, trays, clams
- * plastic film wrap
- * plastic cutlery
- * plastic straws

Small steps can make a big difference. Positive action that you might like to try

- * Only stock drinks that are in packaged in recyclable containers (eg. aluminium cans; PET or #1 plastic bottles).
- * Avoid using single serve sauce portions. Serve sauce from a pump action or squeeze dispenser.
- * Do not automatically serve sugar portions with hot drinks eg. tea, coffee, hot chocolate. Use a sugar dispenser and allow customers to serve themselves.
- * Avoid products in foil packaging (eg. snacks, icecreams) - foil wrappers are not recyclable. Paper and cellophane wrappers can be recycled.
- * Where possible, avoid “throw away” or single use non biodegradable packaging or cutlery. Replace it with items that can be reused and/or recycled.
- * Try using bulk dispensers or jugs to serve milk or juice at the counter instead of single serve packs.
- * Smaller schools may like to introduce reusable plates, cups, cutlery etc that can be returned to the canteen for washing and reuse. A refundable deposit may help to encourage students to return items!
- * Use low phosphate detergents.
- * Use biodegradable cleaning products or non chemical cleaners - these are safer for humans and have less impact on the environment.
- * Upgrade to water and energy efficient equipment. Only operate dishwashers or washing machines with a full load.
- * After laundering, air dry tea towels, dish cloths, hand towels etc. Avoid the use of tumble dryers.
- * Establish compost bins and/or worm farms for all vegetable, fruit and food scraps.
- * Where possible, return milk crates, bread trays, polystyrene boxes, drums, containers etc to suppliers.

Do you have other environmentally friendly ideas?

Please share your ideas with VSCA.

Together we can help to save the planet!

Information in this document has been collected from many sources.

On behalf of our children, our grandchildren and all of our futures, VSCA applauds, congratulates and thanks EVERYONE who is working in so many ways to make a difference to protect our precious planet!