Claims

1. A compostable food packaging comprising:

a) a compostable moulded tray having an interior cavity for receiving a foodstuff, an opening through which the foodstuff can be accessed, and a lip extending at least partially around the opening;

b) wherein the compostable moulded tray forms a compostable barrier, or wherein the compostable moulded tray further comprises a compostable barrier film extended over, and bonded to, the interior cavity and lip of the tray by means of a paper and biofilm heat seal adhesive; and

c) a compostable lid which is peelably adhered around the opening and extending to the lip using a peelable adhesive.

2. The food packaging of claim 1, wherein the barrier or barrier film is formed of a compostable bio-resin material, optionally wherein the barrier or barrier film is formed of multiple layers.

3. The food packaging of any preceding claim, wherein the compostable moulded tray is a compostable moulded fibre tray, optionally a compostable dry moulded fibre tray.

4. The food packaging of any preceding claim, wherein the compostable moulded tray comprises a compostable barrier film extended over, and bonded to, the interior cavity and lip of the tray by means of a paper and biofilm heat seal adhesive, and wherein the barrier film is greater than or equal to about 110 µm thick, or wherein the barrier film is greater than or equal to about 135 µm thick, or wherein the barrier film is greater than or equal to about 150 µm thick, or wherein the barrier film is in the range of about 150 µm to about 170 µm thick.

5. The food packaging of any preceding claim, wherein the heat seal adhesive is applied at a dry coat weight in the range of about 10 gsm to about 24 gsm, or wherein the heat seal adhesive is applied at a dry coat weight in the range of about 12 gsm to about 20 gsm, or wherein the heat seal adhesive is applied at a dry coat weight in the range of about 14 gsm.

6. The food packaging of any preceding claim, wherein the barrier or barrier film is at least partially spray coated to the tray or impregnating within the tray.

7. The food packaging of claims 1 to 2, wherein the compostable moulded tray forms a compostable barrier film, wherein the barrier film is in the range of about 400 µm to about 600 µm thick, optionally wherein the compostable moulded tray forms a compostable barrier film, wherein the compostable moulded tray and compostable barrier film are integrally formed.

8. The food packaging of any preceding claim, wherein the lid comprises cellulose and a polymer.

9. The food packaging of any preceding claim, wherein the heat seal adhesive comprises a polyurethane, optionally the polyurethane comprises one or more of the following: 5-Chloro-2-methyl-4-isothiazolin-3-one and/or 2-Methyl-4-isothiazolin-3-one.

10. The food packaging of any preceding claim, further comprising a foodstuff within the cavity, optionally wherein the foodstuff is a liquid foodstuff, optionally wherein the foodstuff is a sauce, further optionally wherein the condiment is selected from one or more of the following: tomato ketchup, barbeque sauce, mayonnaise, mustard sauce, chili sauce, ranch dressing, curry sauce, and sweet and sour sauce.

11. A method of producing a compostable food packaging comprising:

a) providing a compostable moulded tray having an interior cavity for receiving a foodstuff and an opening through which the foodstuff can be accessed and a lip extending at least partially around the opening;

b) wherein the providing the compostable moulded tray forms a compostable barrier, or wherein the method further comprises applying and/or forming and bonding, by means of a paper and biofilm heat seal adhesive, a compostable barrier film over the interior cavity and lip of the tray;

c) providing a compostable lid and applying it around the opening and at least part of the lip by means of a peelable adhesive; and

d) urging the lid against the opening under heated conditions so as to heat seal the cavity using the lid.

12. The method of claim 11, wherein the method comprises applying and/or forming and bonding, by means of a paper and biofilm heat seal adhesive, a compostable barrier film over the interior cavity and lip of the tray, wherein the barrier film is applied to the interior

cavity and lip of the tray by applying hot air to the film and applying negative pressure to the exterior of the tray.

13. The method of claim 12, wherein the hot air is in the range of about 100ºC to about 140ºC, or the hot air is in the range of about 100ºC to about 110ºC, optionally wherein the hot air is dispensed using a hot air gun, optionally wherein the hot air gun is moved from a distance of about 200 mm from the barrier film to about 100 mm from the barrier film for up to about 2 to about 4 seconds, optionally wherein the hot air gun is moved from a distance of about 190 mm from the barrier film to about 85 mm from the barrier film for up to about 4 seconds.

14. The method of claim 11, wherein the method comprises applying and/or forming and bonding, by means of a paper and biofilm heat seal adhesive, a compostable barrier film over the interior cavity and lip of the tray, wherein the barrier film is at least partially applied to the interior cavity and lip of the tray by spray coating.

15. The method of any one of claims 11 to 14, wherein step d) is undertaken at about 120ºC and/or at about 450lbf and/or for about 1 second.

16. The method of claim 11, wherein the providing the compostable moulded tray forms a compostable barrier, wherein the compostable barrier is thermoformed at a temperature in the range of about 100ºC to about 170ºC, preferably at a temperature in the range of about 100ºC to about 120ºC, most preferably in a range of about 105ºC to about 120ºC, optionally wherein the compostable barrier is thermoformed with a thermoforming dwell time of less than about 1000ms, preferably with a thermoforming dwell time of less than about 800ms, most preferably with a thermoforming dwell time of less than about 700ms.

17. The method of claim 11 or 16, wherein step d) is formed at a temperature of less than about 200ºC, preferably at a temperature of at or less than 170ºC, most preferably at a temperature in a range of about 160ºC to 170ºC.

18. The method of claims 11 or 16 to 17, wherein the compostable moulded tray forms a compostable barrier, wherein the compostable moulded tray and compostable barrier are integrally formed.

19. The method of any one of claims 11 to 18, wherein prior to step c), a liquid food stuff is placed in the cavity.

20. The method of any one of claims 11 to 19, for producing a compostable food packaging of any one of claims 1 to 21.