CLAIMS

1) A sealed package (1, 1') for pourable food products, comprising:

– a quadrilateral bottom panel (6) which comprises a first front edge (10) and a second rear edge (11) opposite to another;

– a quadrilateral top panel (5) which is opposite to said bottom panel (6) and comprises a third front edge (15) and a fourth rear edge (16);

– a front panel (8) which extends between said first and third edges (10, 15);

– a rear panel (7, 7') which extends between said second and fourth edges (15, 16); and

– two lateral panels (9) opposite to each other;

said front panel (8) comprising a fifth and sixth edge (19, 20) which are opposite to one another and extend both between said first and third edges (10, 15);

said rear panel (7, 7') comprising a seventh and an eighth rear edge (18a, 18b; 18a', 18b') which are opposite to one another and extend between said second and fourth edges (11, 16);

said two lateral panels (9) being adjacent to said front and rear panels (8; 7, 7') and extend each from said front to said rear panel (8; 7, 7');

said fifth edge (19) bounding said front panel (8) and one said lateral panel (9);

said sixth edge (20) bounding said front panel (8) and the other said lateral panel (9);

said seventh edge (18a; 18a') bounding said rear panel (7) and said one lateral panel (19);

said eighth edge (18b; 18b') bounding said rear panel (7) and said other lateral panel (19);

said fifth edge (19) and said sixth edge (20) being the only edges which extend between said first edge and third edge (10, 15);

said seventh and eighth edges (18a, 18b; 18a', 18b') being the only edges extending between said second and fourth edges (11, 16);

the distance between said first and third edges (10, 15) being smaller than the distance between said second and fourth edges (11, 16);

said top panel (5) being angled with respect to a first plane defined by said first and second edges (10, 11);

said first and third edges (10, 15) defining a second theoretical reference plane (P);

the sections of said package (1, 1') in a third plane (U) having constant perimeter; said third plane (U) being parallel to said bottom panel (6), said package (1, 1') being formed from a cylindrical tube with a constant diameter;

characterized in that at least one of said fifth and sixth front edges (19, 20) extends at least partially on the opposite side of said second theoretical plane (P) with respect to said rear panel (7, 7');

said front panel (8) comprising at least one first region which extends on the opposite side of said second theoretical plane (P) with respect to said rear panel (7, 7');

said lateral panels (9) being concave;

said fifth and sixth edges (19, 20) comprise respective first portions (40, 41) which extend at increasing distances from said second theoretical reference plane (P), proceeding from said second edge (15) towards said first edge (10).

said fifth and sixth edge (19, 20) further comprise respective second portions (42, 43) which are joined to corresponding first portions (40, 41) and originate, on the opposite side to said corresponding first portions (40, 41), from said first edge (10);

said second portions (42, 43) extending at increasing distances from said second theoretical reference plane (P), proceeding from said first edge (10) towards said first portions (40, 41);

said first and second portions (40, 41; 42, 43) join at a first and a second point (Q, R); said first and second points (Q, R) being arranged at the same distance from said first and third edges (10, 15) and being connected by a segment (S);

said first portions (40, 41) converging towards one another from said third edge (15) towards said segment (S);

said second portions (42, 43) converging towards one another from said first edge (10) towards said segment (S).

2) The sealed package as claimed in claim 1, characterized in that said first region of said front panel (8) is bounded by said third edge (15).

3) The sealed package as claimed in claim 1 or 2, characterized in that the whole said front panel (8) extends on the opposite side of said second theoretical plane (P) with respect to said rear panel (7, 7').

4) The sealed package as claimed any one of the previous claims, characterized in that said front panel (8) extends symmetrically about an axis (C); said axis (C) joining a middle point of said first edge (10), a middle point of said segment (S), and a middle point of said third edge (15).

5) The sealed package as claimed in any one of the previous claims, characterized in that said fifth and sixth edges (19, 20) are separate and distinct from each other; and/or

characterized in that said second and fourth edge (11, 16) defines a fourth reference theoretical plane (T');

said seventh and said eighth rear edges (18a, 18b; 18a', 18b') being opposite to one another and extending both between said second and fourth edges (11, 16);

at least one of said seventh and eighth edges (18a', 18b') extending at least partially on the opposite side of said fourth theoretical plane (T') with respect to said frontal panel (8).

6) The sealed package as claimed in claim 5, characterized in that said seventh and eighth edges (18a, 18b; 18a', 18b') are distinct and separate from each other.

7) The sealed package as claimed in any one of previous claims,characterized in that the angle between said first plane and said top panel (5) ranges between 15 and 20 degrees; and/or

characterized in that said rear panel (7, 7') is flat or convex.

8) A sheet packaging material (M, M') for producing a sealed package (1, 1') of a pourable food product, comprising:

– at least one first crease line (67) and one second crease line (63);

said first crease line (67) comprising a first portion (92) which is adapted to define a first front edge (15) of a top panel (5) of said finished package (1, 1');

said second crease line (63) comprising a second portion (82) which is adapted to define a second front edge (10) of a bottom panel (6) of said finished package (1, 1');

said sheet packaging material (M, M') further comprising:

– a third crease line (65, 182') which extends between respective third portions (90, 80) of said first and second crease lines (67, 63); and

– a fourth crease line (66a, 183') which extends between respective fourth portions (94, 84) respectively of said first and second crease lines (67, 63);

– said first crease line (67) further comprising a fifth portion (91) interposed between said first and respective third potion (92, 90), and a sixth portion (93) interposed between respective said first and fourth portion (92, 94);

said second crease line (63) further comprising a seventh portion (81) interposed between said second and said respective third portions (82, 80), and an eighth portion (83) interposed between said second and said respective fourth portion (82, 84);

said third and fourth crease lines (65, 182' ; 66a, 183'), and said third and fourth portions (90, 80; 94, 84) being adapted to bound a rear panel (7, 7') of said package (1, 1'), once said packaging material (M, M') has been folded along said third and fourth crease lines (65, 182'; 66a, 183'), and along said third and fourth portions (90, 80; 94, 84);

said third and fourth portion (90; 94) of said first crease line (67) being adapted to define a first rear edge (16) of said finished package (1, 1');

said third and fourth portion (80; 84) of said second crease line (63) being adapted to define a second rear edge (11) of said finished package (1, l');

the distance between said third and between said fourth portions (90, 80; 94, 84) being greater than the distance between said first and second portion (92, 82), so that the distance between said first rear edge (16) and said second rear edge (11) is greater than the distance between said first front edge (15) and said second front edge (10) of said finished package (1);

said sheet packaging material (M, M') having a constant width measured orthogonally to an axis (B), so that it could form a tube of packaging material from which said packages (1, 1') are obtained after their folding;

said axis (B) joining a middle-point of said first portion (92) and a middle-point of said second portion (82);

characterized by comprising a fifth and a sixth crease lines (120, 121) extending, at least partially, within a first area (123) which is bounded by a first and a second reference theoretical segment (105, 106), and by said first and second portions (92, 82);

said first reference theoretical segment (105) extending between a first end (100) of said second portion (82) and a second end (101) of said first portion (92);

said second reference theoretical segment (106) extending between a third end (102), opposite to said first end (100), of said second portion (82) and a fourth end (103), opposite to said second end (101), of said first portion (92);

said fifth and sixth crease lines (120, 121) and said second and first portions (82, 92) being adapted to bound a front panel (8) of said package (1, 1'), once said packaging material (M, M') has been folded along said fifth and sixth crease lines (120, 121) and said second and first portions (82, 92);

said fifth and seventh portions (91, 81), said fifth crease line (120), and at least one part of said third crease line (65, 182') being adapted to define a first lateral concave panel (9) extending from said front panel (8) to said rear panel (7, 7') of said package (1, 1'), once said packaging material (M, M') has been folded along said fifth crease line (120), said fifth and seventh portions (91, 81) and said at least one part of said third crease line (65, 182');

said sixth and eighth portions (93, 83), said sixth crease line (121) and at least one part of said fourth crease line (66a, 183') being adapted to define a second lateral concave panel (9) extending from said front panel (8) to said rear panel (7, 7') of said package (1, 1'), once said packaging material (M, M') has

been folded along said sixth crease line (121), said sixth and eighth portions (93, 83) and said at least one part of said fourth crease line (66a, 183');

said fifth crease line (120) being the only one crease line originating from one (100) of said first and second end (100, 101) and extending towards the other one (101) of said first and second end (100, 101);

said sixth crease line (121) being the only one crease line originating from one (102) of said third and fourth end (102, 103) and extending towards the other one (103) of said third and fourth end (102, 103);

said fifth and sixth crease lines (120, 121) at first converge towards one another and then diverge from one another, proceeding from said first portion (92) towards said second portion (82).

9) The sheet packaging material as claimed in claim 8, characterized in that said third and fourth portions (80, 90; 84, 94) are each located on an opposite side of said axis (B).

10) The sheet packaging material as claimed in any one of claims 8 or 9, characterized in that said fifth and sixth crease lines (120, 121) wholly extend within said first area (123).

11) The sheet packaging material as claimed in any one of claims 8 to 10, characterized in that said fifth and sixth crease lines (120, 121) are symmetrical with respect to the axis (B), which joins a middle-point of said first portion (92) and a middle-point of said second portion (82).

12) The sheet packaging material as claimed in any one of claims 8 to 11, characterized in that:

said third crease line (182') extends, at least partially, within a second area (184') which is bounded by a third reference theoretical segment (180'), by said third portions (90, 80) and by a first edge (64) of said sheet packaging material (M');

said fourth crease line (183') extends, at least partially, within a third area (185') which is bounded by said fourth reference theoretical segment (181'), by said fourth portions (94, 84) and by a second edge, opposite to said first edge (64), of said sheet packaging material (M');

said third reference theoretical segment (180') extending between a fifth end (188') of said third portion (90) of said first crease line (67) and a sixth end (187') of said third portion (80) of said second crease line (63);

said fourth reference theoretical segment (181') extending between a seventh end (190') of a fourth portion (94) of said first crease line (67) and an eighth end
(189') of said fourth portion (84) of said second crease line (63);

said third crease line (182') being the only one crease line (182') which originates from one (187') of said sixth and fifth end (187', 188') and extends towards the other one (188') of said sixth and fifth end (187', 188');

said fourth crease line (183') being the only one crease line (182') which originates from one (189') of said seventh and eighth end (189', 190') and extend towards the other one (190') of said seventh and eighth end (189', 190').