

[54] **FLUID CONTAINERS HAVING BOTH
RELATIVELY STRONG AND RELATIVELY
WEAK SEALS**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 835,420, June 23, 1969, abandoned.

[52] U.S. Cl. **222/107**, 96/76 C, 206/17

[51] Int. Cl. ... **B65d 35/08**, B65d 35/14, B65d 35/16

[58] Field of Search 96/29, 76; 222/107

References Cited

UNITED STATES PATENTS

2,634,886	4/1953	Land	222/107
3,056,492	10/1962	Campbell	96/76 C
3,438,505	4/1969	Young	222/107
3,173,580	3/1965	Campbell	222/107
2,849,409	8/1958	Evans	260/17

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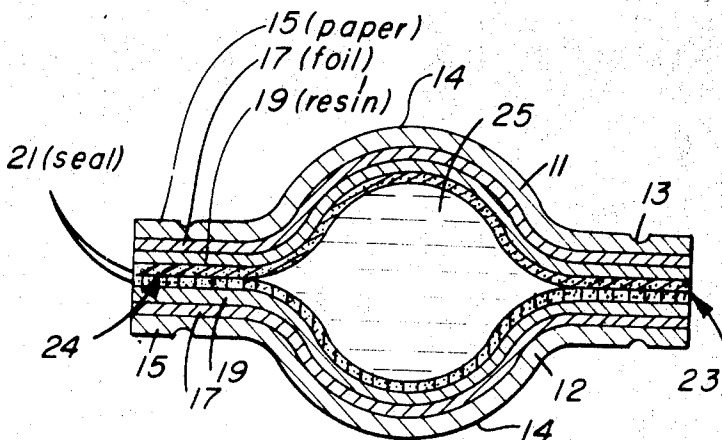
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[57] **ABSTRACT**

A fluid container or pod for photographic processing liquid having a pair of walls carrying a heat activatable adhesive sealed together marginally by heat sealing. Preferably the container walls are both flexible and comprise lead foil carrying kraft paper on one side; and carrying on the other side a coating of a synthetic resin upon which is coated the heat activatable adhesive. The heat activatable adhesive is selected from the group consisting of (a) a plurality of mixed polymers, and (b) a mixture of a polymer selected from the group consisting of alcohol-soluble cellulose acetate butyrate, a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and toluene-soluble cellulose acetate butyrate, with a plasticizer selected from the group consisting of triphenyl phosphate and sulfonamide-formaldehyde resin. By varying the temperature, pressure and time in heat sealing, selected portions of the seal can be relatively strong, and other selected portions relatively weak, for controlled release of liquid through the weak seal portions when pressure is applied.

26 Claims, 8 Drawing Figures



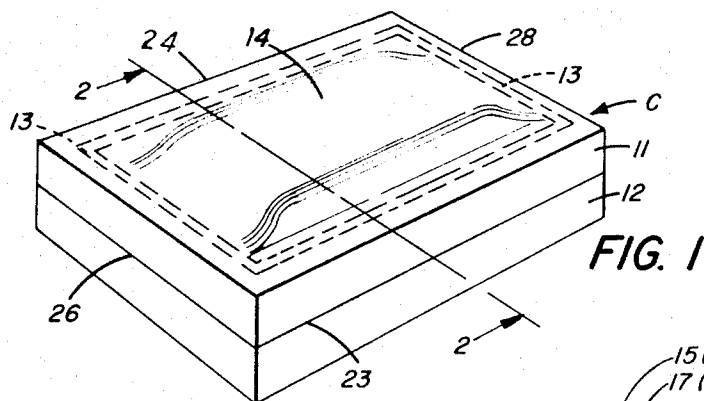


FIG. 1

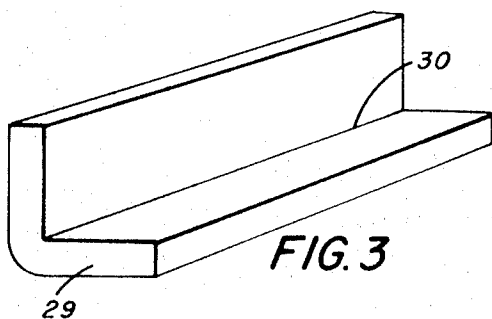


FIG. 3

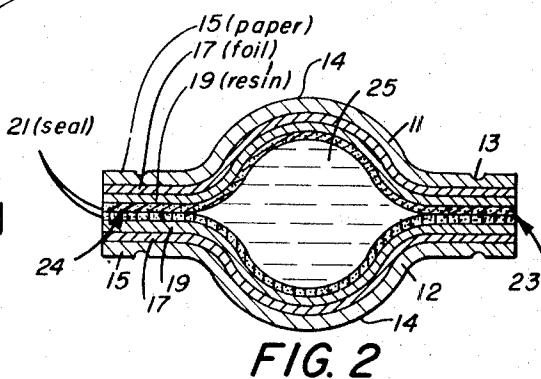


FIG. 2

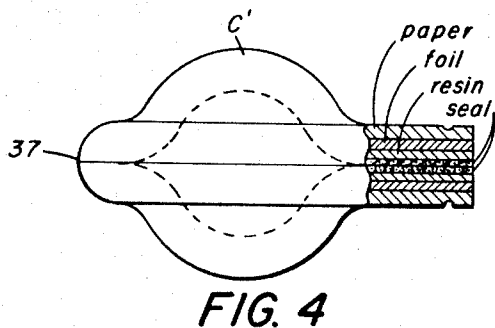


FIG. 4

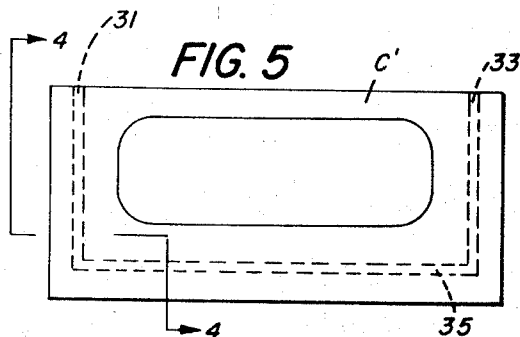


FIG. 5

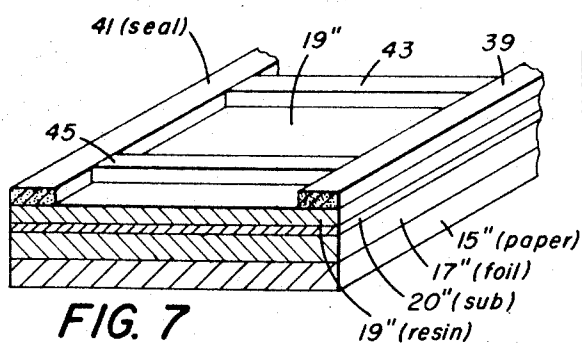


FIG. 7

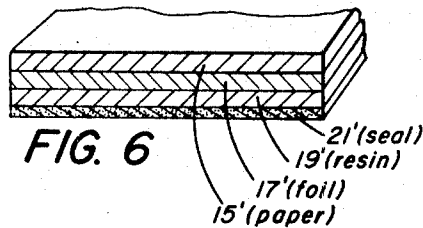


FIG. 6

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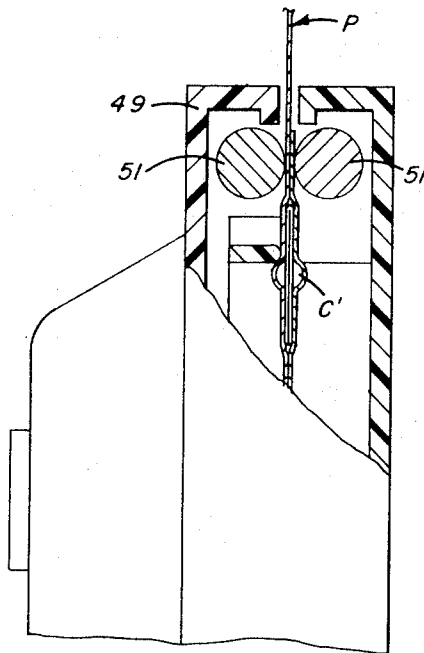


FIG. 8

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FLUID CONTAINERS HAVING BOTH RELATIVELY STRONG AND RELATIVELY WEAK SEALS

This application is a continuation-in-part of my application Ser. No. 835,420 which was filed June 23, 1969, now abandoned.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to fluid containers which are particularly adapted to retain photographic processing compositions. More particularly, the invention concerns such containers, and a method for making same, so constructed that a relatively weak seal is provided where the photographic processing composition is to be released, and a relatively stronger seal is provided over other parts of the container where necessary to prevent release.

2. The Prior Art

U.S. Pat. No. 3,173,580 relates to fluid containers for photographic processing compositions which are formed of a plurality of layers comprising, respectively, an outer layer of kraft paper, a layer of metal foil, and an inner layer of a thermoplastic resin comprising polyvinyl chloride. The containers there described are sealed by the application of heat to marginal areas so as to unite the polyvinyl chloride layers without the use of an adhesive composition. A weak seal on the edge where the photographic composition is to be released is secured by heating appropriate marginal areas under mechanical pressure and at a temperature substantially lower than the temperature to which the remaining portions of the marginally sealed areas are subjected.

SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided a novel fluid container for photographic processing compositions having a pair of opposed walls marginally sealed together face to face, over a substantial area to provide a liquid retaining cavity. At least one, and preferably both, of the walls are flexible and deformable, preferably comprising a sheet of lead foil carrying on the side facing the cavity a layer or coating of a synthetic polymeric resin upon which is coated a heat activatable adhesive on at least the marginal areas to be sealed; and carrying kraft paper on the opposite side.

The layer of polymeric resin is one which is resistant to the liquid within the container and capable of forming a heat seal, and advantageously extends over the entire internal area of each wall.

The adhesive is present as a thin coating of a chemical composition comprising at least one thermoplastic polymer other than polyvinyl chloride, and should be selected from (a) a plurality of mixed polymers, and (b) a polymer selected from the group consisting of alcohol soluble cellulose acetate butyrate, a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and toluene-soluble cellulose acetate butyrate, mixed with a plasticizer selected from the group consisting of triphenyl phosphate and sulfonamide-formaldehyde resin (a sulfonic acid derivative) sold as MHP Santolite by Monsanto Company. The adhesive coating can cover the entire areas defining the inner walls of the container; or it can be coated only on marginal areas where the seals are to be obtained, while the remaining areas are coated with other

compositions which will resist the photographic chemicals.

When using this construction improved controlled strength of the seal is secured by varying the temperature, pressure and time of heat sealing at selected parts of the sealed areas. With high temperatures, and/or high pressures strong seals are provided which will withstand force values such as greater than 1,000 grams and thus will not burst when the container is compressed. Such a strong seal is believed to result from resin punching through the thin adhesive coating in numerous spots. On the other hand, using lower temperatures and/or pressures, only the thin adhesive coatings are believed to unite and the area sealed is weaker than the other areas sealed at higher temperatures and/or pressures, and tends to open up at a force value between 10 and 1,000 grams when the container is compressed, so that the contents can be discharged and distributed uniformly over a selected area of a photographic element to be processed.

My containers resist deterioration in the presence of photographic solutions, such as caustic alkali and/or organic nitrogen-containing compounds of the type employed in the processing of silver halide photographic emulsions.

THE DRAWINGS

The invention will be described with reference to the drawings wherein:

FIG. 1 is a perspective view showing schematically the appearance of one type of fluid container contemplated by the invention;

FIG. 2 is a cross sectional view taken along the line 2-2 in FIG. 1;

FIG. 3 is a perspective view showing schematically a blank having a center fold for making up a modified form of container embodying the invention;

FIG. 4 is a cross sectional view taken along the line 4-4 in FIG. 5;

FIG. 5 is a plan view of the container shown in FIG. 4 formed by folding the blank of FIG. 3 and heat sealing the marginal areas;

FIG. 6 is a perspective view of a sheet of laminated material for forming the containers of FIGS. 1-5;

FIG. 7 is a perspective view of another sheet of laminated material adapted to be formed into a container; and

FIG. 8 is a schematic sectional view, partly in elevation, showing how the container is used in a camera.

THE PREFERRED EMBODIMENTS

Sometimes it is necessary to apply a small quantity of liquid material in a thin layer over a fairly large surface within a piece of apparatus, such as a camera, without gaining access to the interior of the apparatus. For example, a photosensitive film may be processed or a photograph may be toned by applying on the surface thereof within a camera a layer of a liquid processing reagent, such as a developer for a silver-halide emulsion, or a solution of a toning agent. The present invention makes it possible to apply such a thin layer by incorporating within the apparatus a disposable fluid container in the form of a pod or pouch having at least one wall which is formed of a flexible compressible material, and having sealed areas which are relatively weak at one part and relatively stronger at another part for selective opening of the weak seal when the wall is

compressed. With this construction, the container wall can be compressed by an internal mechanical device, whereupon the liquid contained within the container is expelled uniformly through the opened weak seal in the desired direction onto the surface area to be coated.

It is particularly important that such containers be so constructed as to resist deterioration in storage as the result of chemical action by the contained liquids. Deterioration of the container not only may cause leakage from the container, but also may cause contamination of the contained fluid.

The principles of the invention depend primarily upon the use of novel sealing compositions which react to the application of heat and pressure to marginal areas in such a way that variations in these conditions, and in time, result in seals of different strengths. The particular novel compositions will be described more in detail hereinafter, but first the mechanical construction of containers utilizing the invention will be described with reference to the drawings.

FIG. 1 shows a container C comprising an upper wall 11 and a lower wall 12, both of flexible material, which are sealed together along marginal areas 13 extending completely around all four sides of the container. The internal areas of the container walls are not sealed together, but are spaced apart to form a storage space for liquid in the form of a bubble-like protuberance 14 on each side of the container.

Now, referring to FIG. 2, the two flexible walls 11 and 12 are of laminated construction and include several layers which are adhesively joined. Specifically layers 15 of strong kraft paper are adhered to layers 17 of metal foil, such as lead or aluminum which is impervious to the passage of liquid and to the passage of air from the outside into the liquid. Such paper-foil laminates are generally purchased in sheet form as they are readily available on the market.

Layers 19 are a polymeric resinous material which is resistant to the action of the contained liquid, such as a copolymer of vinyl chloride with 2-15 percent by weight of vinyl acetate. This layer is adhered to the lead foil by a sub such as described in my abandoned application Ser. No. 835,353, filed June 23, 1969, entitled "Fluid Containers Resistant to Photographic Processing Solutions," now pending as Ser. No. 26,605 (a continuation-in-part), the disclosure of which is incorporated by reference. A final layer 21 is the novel sealing composition of the present invention.

The two halves 11 and 12 of the container are joined together along marginal portions 13 by heat sealing at one set of conditions of temperature, pressure and time for a strong seal on two or three of the sides, and a different set of such conditions to produce a weak seal 23 on the remaining side or sides. When the liquid is to be expelled through weak seal 23 by passing a pair of rolls over the container, the nip of the rolls can be positioned at the back side 24 and moved toward the front side 23 to expel the liquid at 23. Success is achieved when the seal at side 24 is stronger, weaker, or the same as seal 23, as long as the seals at sides 26 and 28 are enough stronger than seal 23 to resist bursting. In fact, side 24 need not be sealed at all for operability, although it should be sealed for storage purposes. When seals at 23 and 24 are of equal strength, the container or pod can be positioned with either side forward for ease in assembly of film packs or rolls.

In FIG. 2 the sealing layers 21 extend over the entire internal surfaces of the walls 11 and 12, but are only sealed together marginally. A pool 25 of photographic processing liquid inside container C will be expelled when the container is compressed and weak seal 23 is opened while the other edges remain sealed.

FIGS. 3-5 show a different construction wherein a container C' is formed by folding a rectangular blank 29 along a median line 30, and then sealing together the two end margins 31 and 33 with a relatively strong seal and the long side margin 35 with a relatively weaker seal for the discharge of liquid from the container when pressure is applied to the container sufficient to break the weak seal 35.

Referring to FIG. 4, even though the side 37 of the container is closed inherently, it is desirable to heat seal the adjoining areas together so as to form that side with a streamline design to make it easy to pass across the container a pair of compressing rollers or similar compressing devices.

The laminated sheet from which the container C' is made is like that described in connection with FIG. 2, and is further shown on a somewhat larger scale in FIG. 6 wherein 15' is kraft paper, 17' is lead, 19' is polyvinyl chloride-polyvinyl acetate copolymer, and 21' is the sealing layer of the invention. The paper and the polyvinyl chloride-polyvinyl acetate copolymer layers may be joined to the lead layer by using a suitable adhesive material. The sealing layer 21' can be joined to the layer of polyvinyl chloride-polyvinyl acetate copolymer by the use of an intermediate adhesive when layer 21' is in sheet form; or by applying the material of layer 21' in solution in an organic solvent and permitting the solvent to evaporate.

In FIG. 7 there is shown a sheet of material that can be formed into a container, but without the entire inner surface of the container being coated with the sealing layer of the invention. The FIG. 7 modification is a laminated sheet having a paper layer 15'', a foil layer 17'', and a polyvinyl chloride-polyvinyl acetate copolymer layer 19'' joined to the foil by an adhesive sub 20''. Instead of coating the entire surface of layer 19'' with the composition of the invention, coating is only applied to two narrow marginal areas 39 and 41 extending longitudinally of the sheet, and to a series of longitudinally spaced transverse narrow areas 43 and 45. When forming the sheet C'' into containers, transverse cuts are made centrally through the areas 43 and 45, and the blanks thus formed are folded along a transverse fold line midway between areas 43 and 45, as described in connection with FIGS. 3-5. Alternately, after cutting, two blanks can be positioned face-to-face and heat sealed in the manner described in connection with FIGS. 1 and 2. Heat sealing of the two end and one side marginal areas is then accomplished, but the contained liquid is only in contact with the polyvinyl chloride-polyvinyl acetate copolymer layer 19'' bounded by the marginal areas. Strong and weak seals are assured in the same way described in connection with the other figures.

Instead of sealing the entire lengths of edges 23 and 35 under conditions to form a weak seal, it sometimes is desirable to provide alternate areas of weak and strong sealing to assure uniform distribution of the liquid contents. For example, two areas of weak sealing may be provided, spaced apart by a central or intermediate area of strong sealing whereby the liquid is

ejected in two separate streams which merge subsequently.

FIRST MODIFICATION OF SEALING COMPOSITION

The novel compositions for the heat seal layers will now be described in detail. In one type of composition the heat sealable layer is an intimate mixture of two polymeric resins, one of which is characterized by inherent relatively weak heat sealability, and the other of which is characterized by inherent relatively stronger heat sealability. This mixture of polymers is formed in a suitable mutual organic solvent which is compatible with both polymers, the resulting solution is uniformly coated on the areas desired, and the solvent is permitted to evaporate. The organic solvent can be tetrahydrofuran, methyl ethyl ketone, methyl alcohol, ethyl alcohol, or chlorinated hydrocarbon solvents such as dichloromethane. Ratios between 4:1 and 1:4 by weight are operable, but narrower ranges may be preferred. When the solvent has evaporated, small microscopic islands or particles of each polymer individually form in the seal layer. Sealing then takes place between the islands of relatively strong seal polymer, which soften at a lower temperature than do the islands of relatively weak seal polymer. Examples of suitable compositions of mixed polymers are as follows:

TABLE I

A. Relatively Strong Seal Polymer	B. Relatively Weak Seal Polymer	Ratio A/B
1. Styrene-methylmethacrylate copolymer (Zerlon 150-Dow Chemical Co. or Richardson R 570-Richardson Co.) (soften at about 205°F.)	Alcohol soluble cellulose acetate butyrate (ASB-Tennessee Eastman) (softens at higher than 205°F.)	4:1 to 1:4
2. Toluene soluble cellulose acetate butyrate (EAB 381-Tennessee Eastman)	"	3:1 to 1:3
3. Polyvinyl butyral (Butvar B-76-Monsanto)	Alcohol soluble cellulose acetate butyrate (ASB-Tennessee Eastman) (softens at higher than 205°F.)	3:1 to 1:3
4. "	Cellulose nitrate	3:1 to 1:3

In the foregoing compositions the particular cellulose acetate butyrate of composition No. 2 (EAB 381) is toluene soluble and alcohol insoluble; is characterized by having 12-15 percent acetyl, more than 20 percent (advantageously 35-39 percent) butyryl, and 1.6-1.8 percent free hydroxyl; and has an average molecular weight of about 40,000. Success may be achieved when this composition has an intrinsic viscosity in acetone of between 0.7 and 1.85.

The Butvar B-76 resin of composition No. 3 is a commercial poly(vinyl butyral) having a hydroxyl content expressed as percent poly(vinyl alcohol) of between 9 and 13, produced by Monsanto Company.

The ASB alcohol soluble cellulose acetate butyrate of composition No. 1 is described in U.S. Pat. No. 3,370,025 and is a resin which is soluble in at least 95 percent anhydrous ethanol and is characterized by 42-52 percent butyryl, less than 5 percent acetyl, and 3-9 percent free hydroxyl (advantageously 48 percent, 2.8 percent, and 3 percent, respectively.)

Zerlon 150 is a copolymer containing, by weight, about 70 percent methyl methacrylate and 30 percent styrene. Richardson R 570 is a copolymer containing about 40 percent methyl methacrylate and 60 percent

styrene. An operable range is from about 30 percent to about 80 percent by weight of methyl methacrylate, balance styrene.

Successful coatings of the compositions described above on a substrate such as a laminated sheet have been secured with solutions having the following compositions:

TABLE II

	% by weight
1. Zerlon 150	1.8
ASB	1.2
Tetrahydrofuran or Methyl Ethyl Ketone	97.0
2. Eab 381	3.5
ASB	1.5
Dichloromethane	94.0
Methyl Alcohol	1.0
3. Butvar B-76	3.5
ASB	1.5
Ethyl Alcohol	95.0
4. Butvar B-76	3.5
Cellulose Nitrate	1.5
Ethyl Alcohol	95.0

A heat seal temperature to form a relatively weak seal with the above compositions should be selected within the range between 150° and 350° F.; and to form the relatively strong seal a higher temperature should be selected within the range between 200° and 400° F. Pressures may be varied between 10 psi. and 3,000 psi, and the higher the pressure the stronger is the seal (probably as a result of forcing the underlying vinyl resin to punch through the seal layer and fuse together). Dwell time for sealing may vary between 0.1 second and 3 seconds.

Generally the proper seal temperature is assured by the proper temperatures of the sealing jaws or plates, within the above ranges. In some cases the jaw temperature for the strong seal can be no higher than, and even lower than, the jaw temperature for the weak seal, as when the weak seal is made first and there is residual heat left in the container. This can also be true when the pressure exerted to produce the strong seals is substantially greater than the pressure for the weak seals. Selection of the proper temperature is accomplished by trial-and-error procedure. Heating may be by conduction or induction, or may be by ultrasonic vibrations, as described in Bodine U.S. Pat. No. 3,022,814 and many others. Generation of the appropriate temperature ultrasonically is accomplished by varying the vibration time, determined empirically.

The force required to peel the seals apart varies between 3 and 100 grams for a weak seal, and 500 grams and up for a strong seal.

The polymer combinations described above produce the most stable seals of all systems tested. Photographic developer liquid is kept in containers using these polymer combinations as the internal surfaces at 30° to 150° F., and at relative humidities of 0 to 90 percent, with no damage to or deterioration of the seal strength of the seals or the character of the developer liquid.

While it is not fully understood how the combined resins operate to achieve the beneficial results of this invention, theoretically it is because the strong sealing occurs at the higher temperature and/or higher pressure which causes the surface layer to be pushed aside (or piled up) so that the underlying vinyl resin layer 19, 19' or 19'' punches through the surface layer. Thus the vinyl resin is exposed and fuses together to form a strong vinyl-to-vinyl seal. On the other hand, the weak

sealing occurs at the lower temperature and/or pressure as a result of the fusing together of only that portion of the surface sealing layer **21**, **21'**, **41** which softens first, while the rest of the sealing layer remains unfused, so that the polymer mixtures provide microscopic points of sealing and nonsealing.

SECOND MODIFICATION OF SEALING COMPOSITION

In a second modification of the invention, the heat sealing layer or coating comprises an intimate mixture of a thermoplastic polymeric resin selected from the group consisting of alcohol soluble cellulose acetate butyrate, toluene soluble cellulose acetate butyrate, and a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, with a plasticizer selected from the group consisting of triphenyl phosphate and MHP Santolite sulfonamide-formaldehyde resin. The plasticizer combines with the polymer to reduce the heat seal temperature, and makes it possible to control the degree of heat sealing. Advantageously, 1 part of plasticizer by weight should be present for between 10 and 30 parts by weight of resin.

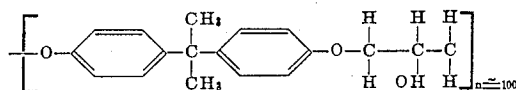
Specific examples of compositions of this type which are characterized by the ability to form selectively a relatively strong or a relatively weak seal when subjected to different conditions of temperature, pressure and time after being coated upon the container walls from a solvent solution are as follows:

TABLE III

	% by weight
5. Alcohol soluble cellulose acetate butyrate (ASB-Tennessee Eastman)	4
Sulfonamide-formaldehyde resin (MHP Santolite-Monsanto)	0.16
Tetrahydrofuran	95.84
6. Alcohol soluble cellulose acetate butyrate (ASB)	4
Triphenyl phosphate	0.16
Tetrahydrofuran	95.84
7. Polyhydroxy ether (phenoxy PK HH-Union Carbide)	3.99
Sulfonamide-formaldehyde resin (MHP Santolite-Monsanto)	0.32
Tetrahydrofuran	95.69
8. Polyhydroxy ether (Phenoxy PK HH)	4.00
Triphenyl phosphate	0.16
Tetrahydrofuran	95.84
9. Toluene soluble cellulose acetate butyrate (M 16 Lint-Tennessee Eastman)	3.99
Triphenyl phosphate	0.16
Tetrahydrofuran	95.85

Further identification of those materials in Nos. 5-9 above which have not been identified previously herein are as follows:

Phenoxy PK HH, sold by Union Carbide Corporation, is a high molecular weight (about 30,000) polyhydroxy ether made by copolymerizing bisphenol A and epichlorohydrin. The repeating unit is:



M 16 Lint, sold by Tennessee Eastman Company, is a toluene soluble cellulose acetate butyrate essentially the same as EAB 381 described above.

Using the above combinations of polymeric resins and plasticizers, the comments concerning the first modification also apply. Thus the heat seal temperature required to form relatively weak seals should be selected from the range between 150° and 350° F., and to form the relatively strong seals a higher temperature should be selected between 200° and 400° F. Pressures can be varied from 10 psi. to 3,000 psi., and the higher the pressure the stronger is the seal; and the time of sealing can be varied between 0.1 second and 3 seconds. Under the conditions described the force required to break the seals varies from 3 grams to 100 grams for a weak seal, and 500 grams and higher for a strong seal.

In both modifications described in detail above, the coating **21**, **21'** or **41** advantageously is between 0.005 and 0.3 mil thick for satisfactory results.

The underlayer **19**, **19'** or **19''** of polymeric resin which is resistant to the contained liquid and capable of forming a heat seal can be a copolymer of polyvinyl chloride and polyvinyl acetate, a polyvinyl acetal such as mentioned in U.S. Pat. No. 3,173,580, or other polymeric resins such as nylon, polysulfones, and polyethylene.

My copending application has been referred to above for a description of a sub layer that can be used for adhering the resin coatings **19**, **19'** or **19''** to the lead foil **17**, **17'** or **17''**. Advantageously, such a sub layer comprises a thin coating of a butadiene-acrylonitrile copolymer containing free carboxylic groups (such as is produced by the B.F. Goodrich Chemical Co. and sold under the trademark Hycar 1072, containing about 67 percent butadiene, desirably 60-70 percent, and about 33 percent acrylonitrile, desirably 30-40 percent by weight).

An even tighter adherence of the Hycar 1072 coating to the lead foil is secured when a small quantity of n-(trimethoxysilylpropyl) ethylene diamine (produced and sold by Dow-Corning under the trademark A-6020 Silane) is mixed with the Hycar 1072. This additive assists the bonding, it is believed, by forming a chemical linkage with the lead surface.

FIG. 8 shows a container **C'** of the invention positioned between two sheets of a photographic film pack **P** within a camera **49**. When pack **P** is pulled out of the camera **49** between a pair of pressure rolls **51** after a picture has been taken, the rolls compress container **C'** and burst the seal at the lagging edge thereof, thus causing the photographic processing solution to be expelled and distributed uniformly into contact with the photographic emulsion on the photographically exposed sheet of pack **P**. Reference is made to U.S. Pat. No. 3,294,538 for further description of such a camera. It is evident that similar results can be secured by passing a pair of rolls across a stationary container **C'**.

The invention has been described in detail with particular reference to preferred embodiments thereof, but it will be understood that variations and modifications can be effected within the spirit and scope of the invention.

I claim:

1. A fluid container for photographic processing liquid having a pair of opposed walls marginally sealed together over a substantial sealing area to provide a liquid retaining cavity, at least one of said walls being flexible and deformable, said opposed walls over the entire internal areas thereof having a processing liquid resistant

polymeric resin underlayer, and over at least said entire sealing area both walls having the same coating over said underlayer of a chemical composition comprising at least one thermoplastic polymer, the coatings of said walls being heat sealed together, a selected part of said area having been subjected to one set of temperature, pressure, and time conditions to form a relatively strong seal, another part of said area having been subjected to a different set of such conditions to form a relatively weaker seal, whereby upon application of pressure to said container only said weaker seal ruptures and releases said liquid, said coating being selected from the group consisting of (a) a mixture of two polymers, the first one of said polymers being selected from the group consisting of cellulose nitrate and alcohol soluble cellulose acetate butyrate, the second one of said polymers being selected from the group consisting of styrene-methyl methacrylate copolymer, toluene soluble cellulose acetate butyrate, and polyvinyl butyral, and (b) a mixture of a polymer selected from the group consisting of alcohol soluble cellulose acetate butyrate, a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and toluene soluble cellulose acetate butyrate, with a plasticizer selected from the group consisting of triphenyl phosphate and sulfonamide-formaldehyde resin.

2. A fluid container in accordance with claim 1 wherein said walls at least over the marginally sealed area thereof have a heat sealable coating comprising such an intimate mixture of two polymers, said first one of said polymers being characterized by inherent relatively weak heat sealability, said second one of said polymers being characterized by inherent relatively strong heat sealability.

3. A fluid container in accordance with claim 2 wherein said first polymer is selected from the group consisting of cellulose nitrate and alcohol soluble cellulose acetate butyrate, and wherein said second polymer is selected from the group consisting of styrene-methyl methacrylate copolymer, toluene soluble cellulose acetate butyrate, and polyvinyl butyral.

4. A fluid container in accordance with claim 3 wherein said first and second polymers are present in a ratio between 4 to 1 and 1 to 4 by weight.

5. A fluid container in accordance with claim 4 wherein said mixture consists essentially of styrene-methyl methacrylate copolymer and alcohol soluble cellulose acetate butyrate.

6. A fluid container in accordance with claim 4 wherein said mixture consists essentially of toluene soluble cellulose acetate butyrate and alcohol soluble cellulose acetate butyrate.

7. A fluid container in accordance with claim 4 wherein said mixture consists essentially of polyvinyl butyral and alcohol soluble cellulose acetate butyrate.

8. A fluid container in accordance with claim 4 wherein said mixture consists essentially of polyvinyl butyral and cellulose nitrate.

9. A fluid container in accordance with claim 1 wherein said walls at least over the marginally sealed areas thereof have a heat sealable coating comprising such an intimate mixture of a thermoplastic polymer selected from the group consisting of alcohol soluble cellulose acetate butyrate, toluene soluble cellulose acetate butyrate, and a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin; and a plasticizer selected from the group consisting of

triphenyl phosphate and sulfonamide-formaldehyde resin; said mixture being characterized by the ability to form a relatively strong seal when subjected to one set of conditions of temperature, pressure and time, and to form a relatively weaker seal when subjected to a different set of conditions.

10. A fluid container in accordance with claim 9 wherein said thermoplastic polymer is alcohol soluble cellulose acetate butyrate, and wherein said plasticizer is sulfonamide-formaldehyde resin.

11. A fluid container in accordance with claim 9 wherein said thermoplastic polymer is alcohol soluble cellulose acetate butyrate, and wherein said plasticizer is triphenyl phosphate.

12. A fluid container in accordance with claim 9 wherein said thermoplastic polymer is a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and wherein said plasticizer is sulfonamide-formaldehyde resin.

13. A fluid container in accordance with claim 9 wherein said thermoplastic polymer is a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and wherein said plasticizer is triphenyl phosphate.

14. A fluid container in accordance with claim 9 wherein said thermoplastic polymer is toluene soluble cellulose acetate butyrate, and wherein said plasticizer is triphenyl phosphate.

15. A method of forming a fluid container in accordance with claim 1, comprising providing a pair of opposed walls having the entire internal areas thereof provided with an underlayer of heat sealable resin and over at least marginal areas thereof on top of said underlayer an overcoating of a chemical composition comprising at least one thermoplastic polymer, said composition being selected from the group consisting of (a) a mixture of two polymers, the first one of said polymers being selected from the group consisting of cellulose nitrate and alcohol soluble cellulose acetate butyrate, the second one of said polymers being selected from the group consisting of styrene-methyl methacrylate copolymer, toluene soluble cellulose acetate butyrate, and polyvinyl butyrate, said first one of said polymers being characterized by inherent relatively weak heat sealability, said second one of said polymers being characterized by inherent relatively stronger heat sealability; and (b) a mixture of a polymer selected from the group consisting of alcohol soluble cellulose acetate butyrate, a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin, and toluene soluble cellulose acetate butyrate, with a plasticizer selected from the group consisting of triphenyl phosphate and sulfonamide-formaldehyde resin; placing said opposed walls together over said marginal areas;

subjecting a first part of said marginal areas to one set of conditions of temperature, pressure, and time to form a relatively strong seal; and

subjecting another part of said marginal areas to a different set of conditions of temperature, pressure, and time effective to form a relatively weaker seal, whereby liquid is releasable through said weaker seal upon application of pressure to said container.

16. A method in accordance with claim 15 wherein said composition comprises said first polymer selected from the group consisting of cellulose nitrate and alco-

hol soluble cellulose acetate butyrate, and said second polymer selected from the group consisting of styrene-methyl methacrylate copolymer, toluene soluble cellulose acetate butyrate, and polyvinyl butyral.

17. A method in accordance with claim 15 wherein said composition comprises a polymer selected from the group consisting of alcohol soluble cellulose acetate butyrate, toluene soluble cellulose acetate butyrate, and a polyhydroxy ether resulting from copolymerization of bisphenol A with epichlorohydrin; and a plasticizer selected from the group consisting of triphenyl phosphate and sulfonamide-formaldehyde resin.

18. A method in accordance with claim 15, also comprising providing said coating by dissolving the selected composition in a solvent, coating the resulting solution on said areas, and permitting said solvent to evaporate.

19. A method in accordance with claim 15, wherein said first part of said area is sealed at a temperature between 200° and 400° F., and said other part of said area is sealed at a lower temperature between 150° and 350° F.

20. A fluid container in accordance with claim 1 wherein said selected part of said area having a relatively strong seal comprises two opposite sides of said fluid container, and wherein said other part of said area comprises the other two opposite sides, said other two opposite sides being sealed with seals of essentially the same relatively weaker strength.

21. A fluid container in accordance with claim 1 wherein said walls comprise a plurality of layers, one of said layers being lead foil, another of said layers being kraft paper adhering to the outside of said lead foil, and another of said layers being a polymeric resin adhering to the inside of said lead foil between said lead foil and said coating.

22. A fluid container in accordance with claim 5 wherein said walls comprise a plurality of layers, one of

said layers being lead foil, another of said layers being kraft paper adhering to the outside of said lead foil, and another of said layers being a polymeric resin adhering to the inside of said lead foil between said lead foil and said coating.

23. A fluid container in accordance with claim 9 wherein said walls comprise a plurality of layers, one of said layers being lead foil, another of said layers being kraft paper adhering to the outside of said lead foil, and another of said layers being a polymeric resin adhering to the inside of said lead foil between said lead foil and said coating.

24. A method in accordance with claim 19 wherein said composition consists essentially of alcohol soluble cellulose acetate butyrate and styrene-methyl methacrylate copolymer in a ratio between 4 to 1 and 1 to 4 by weight.

25. A container in accordance with claim 22 filled with an alkaline photographic processing solution.

26. A fluid container for photographic processing liquid having a pair of opposed walls marginally sealed together over a substantial sealing area to provide a liquid retaining cavity, at least one of said walls being flexible and deformable, said opposed walls over the entire internal areas thereof each having a processing liquid-resistant thermoplastic polymeric vinyl resin layer;

said opposed walls over at least a marginal area thereof each having a coating over said vinyl resin layer of a mixture of alcohol soluble cellulose acetate butyrate and styrene-methyl methacrylate copolymer in a ratio between 4 to 1 and 1 to 4 by weight;

part of said sealing area comprising a relatively strong seal comprising vinyl resin of said layers fused together, the remainder of said sealing area comprising a relatively weaker seal comprising only said coatings fused together.

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