

LET'S PRESERVE

Fruit Pie Fillings

General

The following fruit fillings are excellent and safe products. Each canned quart makes one 8- to 9-inch pie. Fillings may be used as toppings on desserts or pastries. ClearJel® is a starch modified to produce excellent sauce consistency even after fillings are canned and baked. Other available household starches break down, causing a runny sauce consistency when used in these pie fillings. ClearJel® is not available in most grocery stores. It may be purchased online or from one of the vendors listed on the following page. Find out about its availability prior to gathering other ingredients to make these pie fillings. If you cannot find it, contact your local Penn State Extension office.

Because the variety of fruit may alter the flavor of the fruit pie, you should first make a single quart, make a pie with it, and serve. Then adjust the sugar and spices in the recipe to suit your personal preferences. *The amount of lemon juice should not be altered because it aids in ensuring the safety and storage stability of the fillings.* When using frozen cherries and blueberries, select unsweetened fruit. If sugar has been added, rinse it off while fruit is frozen. Collect, measure, and use juice from thawing fruit to partially replace the water specified in the recipe and use only ¼ cup of ClearJel® per quart, or 1¾ cups for 7 quarts.

Canning Procedure for All Fillings

Wash jars. Prepare lids according to manufacturer's instructions. Refer to "Let's Preserve: Basics of Home Canning." Fill fruit mixtures into jars, leaving 1 inch of headspace. Remove air bubbles. Wipe sealing surface of jars with a clean, damp paper towel. Add lids, tighten screw bands, and process according to Table 5.

CAUTION: The amount of lemon juice should not be altered because it aids in ensuring the safety and storage stability of the fillings.

To Process in a Boiling Water Canner

Preheat canner half filled with water to 180°F. Load sealed jars into the canner rack and lower with handles, or load one jar at a time with a jar lifter onto rack in canner. Add water, if needed, to 1 inch above jars and cover. When water boils vigorously, lower heat to maintain a gentle boil and process for recommended time.

After processing is complete, remove canner from heat, remove canner lid, allow jars to sit in canner five minutes. Remove jars from canner with a jar lifter and place them on a towel or rack. Do not retighten screw bands. Air-cool jars for 12 to 24 hours. Remove screw bands and check lid seals. A jar is sealed if the center of its lid is indented or concave. Wash, dry, label, and store sealed jars in a clean, cool, dark place. If a jar is unsealed, examine and replace it if



defective, use a new lid, and reprocess as before. Wash screw bands and store separately. Fillings are best if used within one year and are safe as long as lids remain vacuum sealed.

Canned Apple Pie Filling

QUALITY. Use firm, crisp apples. Stayman, Golden Delicious, Rome, and other varieties of similar quality are suitable. If apples lack tartness, use an additional ¼ cup of lemon juice for every 6 quarts of slices.

PROCEDURE. Wash, peel, and core apples. Prepare slices ½ inch wide and place in water containing 1 teaspoon of ascorbic acid crystals or six finely crushed 500-milligram vitamin C tablets in 1 gallon of water to prevent browning.

For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch for 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar, ClearJel®, cinnamon, and nutmeg in a large kettle with water, apple juice, and food coloring. Stir and cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil sauce for 1 minute, stirring constantly. Fold in drained apple slices, immediately fill jars with mixture, leaving 1 inch of headspace, and process without delay.

Canned Blueberry Pie Filling

QUALITY. Select sweet, very ripe but firm, deep-blue fruit.

PROCEDURE. Wash and drain blueberries. For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch for 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar and ClearJel® in a large kettle. Stir. Add water and, if desired, food coloring. Cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil for 1 minute, stirring constantly. Fold in undrained berries, fill jars immediately with mixture, leaving 1 inch of headspace, and process without delay.



PennState Extension

Canned Cherry Pie Filling

QUALITY. Select very ripe, firm, tart cherries.

PROCEDURE. Rinse and pit cherries and hold them in cold water. To prevent stem end browning, hold pitted cherries in water containing 1 teaspoon of ascorbic acid crystals or six finely crushed 500-milligram vitamin C tablets in 1 gallon of water. For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch for 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar and ClearJel® in a large saucepan. Add water and, if desired, cinnamon, food coloring, and almond extract. Stir mixture and cook over medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil for 1 minute, stirring constantly. Fold in drained cherries, fill jars immediately with mixture, leaving 1 inch of headspace, and process without delay.

Canned Peach Pie Filling

QUALITY. Select ripe but firm peaches. Red Haven, Redskin, Sun High, and other varieties of similar quality are suitable.

PROCEDURE. Peel peaches. To loosen skins, submerge peaches in boiling water for 30 to 60 seconds and then place them in cold water for 20 seconds. Slip off skins and prepare slices ½ inch wide. Place slices in water containing 1 teaspoon of ascorbic acid crystals or six finely crushed 500-milligram vitamin C tablets in 1 gallon of water to prevent browning. For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch for 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar, ClearJel®, water, and cinnamon or almond extract in a large kettle. Stir and cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil sauce for 1 minute more, stirring constantly. Fold in drained peach slices and continue to heat for 3 minutes, then fill jars with mixture, leaving 1 inch of headspace, and process without delay.

*About ClearJel®

There are about 3 cups in 1 pound of ClearJel®. Penn State Extension pie filling recipes take about 1½ to 2¼ cups per 6–7 quarts of pie filling. Some bulk food stores or cooperatives may carry ClearJel®; be sure you are getting cook-type ClearJel®.

Sources for ClearJel®

Kitchen Krafts
PO Box 442
Waukon, IA 52172
Phone: 563-535-8000
www.kitchenkrafts.com

Kauffman's Fruit Farm
3097 Old Philadelphia Pike
Bird-in-Hand, PA 17505
Phone: 717-768-7112
www.kauffmansfruitfarm.com



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► **Table 1.** Canned apple pie filling.

Ingredient	Quantities of ingredients needed for	
	1 quart	7 quarts
Blanched sliced apples	3½ cups	6 quarts
Granulated sugar	¾ cup + 2 Tbsp	5½ cups
ClearJel®	¼ cup	1½ cups
Cinnamon	½ tsp	1 Tbsp
Cold water	½ cup	2½ cups
Apple juice, unsweetened	¾ cup	5 cups
Bottled lemon juice	2 Tbsp	¾ cup
Nutmeg (optional)	⅛ tsp	1 tsp
Yellow food coloring (optional)	1 drop	7 drops

► **Table 2.** Canned blueberry pie filling.

Ingredient	Quantities of ingredients needed for	
	1 quart	7 quarts
Fresh or thawed blueberries	3½ cups	6 quarts
Granulated sugar	¾ cup + 2 Tbsp	6 cups
ClearJel®	¼ cup + 1 Tbsp	2¼ cups
Cold water	1 cup	7 cups
Bottled lemon juice	3½ tsp	½ cup
Blue food coloring (optional)	3 drops	20 drops
Red food coloring (optional)	1 drop	7 drops

► **Table 3.** Canned cherry pie filling.

Ingredient	Quantities of ingredients needed for	
	1 quart	7 quarts
Fresh or thawed sour cherries	3½ cups	6 quarts
Granulated sugar	1 cup	7 cups
ClearJel®	¼ cup + 1 Tbsp	1¾ cups
Cold water	1½ cups	9½ cups
Bottled lemon juice	1 Tbsp + 1 tsp	½ cup
Cinnamon (optional)	⅛ tsp	1 tsp
Almond extract (optional)	¼ tsp	2 tsp
Red food coloring (optional)	6 drops	¼ tsp

► **Table 4.** Canned peach pie filling.

Ingredient	Quantities of ingredients needed for	
	1 quart	7 quarts
Fresh sliced peaches	3½ cups	6 quarts
Granulated sugar	1 cup	7 cups
ClearJel®	¼ cup + 1 Tbsp	2 cups + 3 Tbsp
Cold water	¾ cup	5¼ cups
Cinnamon (optional)	⅛ tsp	1 tsp
Almond extract (optional)	⅛ tsp	2 tsp
Bottled lemon juice	¼ cup	1¾ cups

Table 5. Recommended process times for fruit pie fillings in a boiling water canner.

Fruit filling	Jar size	Process time (in minutes) at altitudes of			
		0–1,000 ft	1,001–3,000 ft	3,001–6,000 ft	Above 6,000 ft
Apple	Pints or quarts	25	30	35	40
Blueberry	Pints or quarts	30	35	40	45
Cherry	Pints or quarts	30	35	40	45
Peach	Pints or quarts	30	35	40	45

Frozen Pie Fillings

THERMFLO: Look for ThermFlo® in the bulk section of the grocery store. If it is unavailable in your area, it can be purchased from Kauffman’s Fruit Farm (see page 2).

Frozen Apple Pie Filling

- 18 large baking apples (about 6 pounds)
- 1½ to 2 cups sugar
- ½ cup quick-cooking tapioca
- 3 tablespoons lemon juice
- 1½ to 2 teaspoons cinnamon

Peel and core apples. Slice apples into a color preserver solution.* Drain. In a 6- to 8-quart saucepan, combine apples and remaining ingredients. Let stand for 15 to 20 minutes until sugar dissolves and liquid begins to form. Cook over medium heat for 10 to 20 minutes or until mixture thickens and apple wedges are tender. Stir frequently but gently so that pieces do not break up. Place pan in cold water to cool cooked mixture. Stirring mixture occasionally and changing water around the pan will hasten chilling. Fill clean wide-mouth freezer jars or food-grade plastic freezer containers with mixture, allowing 1½-inch headspace. Crushed food-safe plastic wrap may be put on top of the mixture to reduce air space in the jar. Place in the refrigerator to completely cool and then immediately put in the freezer.

Yield: about 4 pints. Use within 6 to 8 months for best quality.

*Prevent the apples from turning brown by placing in a solution of 2 quarts water and 6 finely crushed vitamin C tablets or 1 teaspoon ascorbic acid or 2 tablespoons bottled lemon juice. Commercial color preservers such as Fruit Fresh® may also be used.

Frozen Blueberry Pie Filling

- 12 cups blueberries
- 3 cups sugar
- ½ cup plus 2 tablespoons ThermFlo®
- 1 tablespoon grated lemon zest
- ¼ cup lemon juice

Wash and drain blueberries. Mix sugar and ThermFlo®. Stir into the blueberries. Let stand about 30 minutes until juice forms. Add lemon zest and juice. Cook over medium heat until mixture boils and thickens. Mixture will be very thick and should be at least 185°F. Place pot in cold water, changing water as needed, and stir the filling to cool it to room temperature within 2 hours. Ladle pie filling into freezer jars or plastic freezer boxes, leaving ½-inch headspace. Seal. Place containers in the refrigerator until completely chilled. Label and freeze.

Yield: about 5 pints. Use within 6 to 8 months for best quality.

Frozen Cherry Pie Filling

- 8 cups tart cherries
- 2½ cups sugar
- ½ cup ThermFlo® or minute tapioca

Wash cherries; drain. Pit cherries. Mix sugar and ThermFlo®. Stir into the cherries. Let stand about 30 minutes until juice forms. Cook over medium heat until mixture begins to thicken. Mixture will be very thick and should be at least 185°F. Place pot in cold water, changing water as needed, and stir the filling to cool it to room temperature within 2 hours. Ladle pie filling into freezer jars or plastic freezer boxes, leaving ½-inch headspace. Seal. Place containers in the refrigerator until completely chilled. Label and freeze.

Yield: about 4 pints. Use within 6 to 8 months for best quality.

Frozen Peach Pie Filling

- 6 pounds peaches
- 2¼ cups sugar
- ¼ cup ThermFlo®
- 1 teaspoon cinnamon
- ½ teaspoon nutmeg (optional)
- 2 teaspoons lemon zest
- ¼ cup lemon juice

Wash peaches, drain. Peel, pit and slice peaches. (To prevent peaches from turning dark, place peeled fruit in water with vitamin C made by mixing 1 teaspoon ascorbic acid crystals or six finely crushed 500-milligram vitamin C tablets in 1 gallon of water.) Combine sugar, ThermFlo®, and spices. Rinse and drain peaches. Stir into sugar mixture. Let stand about 30 minutes until juice forms. Add lemon zest and juice. Cook over medium heat until mixture begins to thicken. Mixture will be very thick and should be at least 185°F. Place pot in cold water, changing water as needed, and stir the filling to cool it to room temperature within 2 hours. Ladle pie filling into freezer jars or plastic freezer boxes, leaving ½-inch headspace. Seal. Place containers in the refrigerator until completely chilled. Label and freeze.

Yield: about 4 pints. Use within 6 to 8 months for best quality.

Be creative with your use of frozen pie fillings. Think of all the uses of canned pie fillings—toppings for cheesecake, fillings for crepes, sides for angel food cake. Simply thaw a frozen pie filling and use in the same manner. With a few changes, the frozen filling can also be used for a fruit crisp or a cobbler. If you want to make a cobbler, bake the filling until hot before adding the biscuit topper, or the dough will be done before the filling is thickened and tender. To make a crisp, reduce the sugar in the filling by half since the crumb topping will provide the additional sugar needed for sweetness. A simple crisp recipe is to top the frozen filling with 1 cup quick oats, ½ cup flour, ½ cup brown sugar, ½ teaspoon salt, ½ teaspoon cinnamon, and ⅓ cup melted butter or oil and bake it at 375°F for 60 minutes.



Tips for Freezing and Baking Pies

- Freezing an unbaked pie yields a better fresh fruit flavor than freezing a baked pie, but the bottom crust tends to get soggy. Therefore, try freezing the filling and crust separately to prevent the fruit juice from penetrating and softening the lower crust during freezing. Combine just before baking.
- Pie filling can be ladled into a foil-lined pie pan or placed in a freezer bag and shaped to the pan. When filling is frozen solid, remove from the pan, wrap, and freeze until ready to bake. Place the pan-shaped frozen filling into a pastry-lined pan and bake as usual, allowing extra time for fruit to heat through. This filling can also be frozen in the same manner in a foil-lined casserole to use as a fruit crisp or cobbler.
- Bake in lower third of preheated oven for first 25 minutes at 425°F. Reduce heat to 350°F and raise the pie to the center of the oven to finish baking. (Susan Gold Purdy, *The Perfect Pie*)
- Another baking option: Put pan on cookie sheet. Bake without thawing at 450°F for 15 to 20 minutes; then reduce heat to 375°F for 20 to 30 minutes or until top crust is brown.
- Cover the pastry edges with a pastry frame or strips of aluminum foil if they seem to be browning too fast.
- Small slivers of butter can be dotted over the pie filling before adding the top crust. You can also sprinkle with cinnamon or nutmeg if desired.
- Adding ½ teaspoon ascorbic acid or Fruit Fresh® with the sugar for light-colored fruit pie filling such as peach, pear, or cherry will help maintain color.
- Do not cut vents in the top crust of an unbaked pie before freezing. Cut vent holes in the upper crust just before baking.
- Freeze first—pies are easier to wrap after freezing.

To serve frozen pies or pastry:

- Baked pastry: Thaw in wrapping in the refrigerator.
- Unbaked pastry: If baking unfilled, prick before freezing—pricking a frozen pastry will cause it to break. Bake still frozen at 475°F, until light brown, or fill and bake as usual.
- Baked fruit pie: Make as usual. Cool rapidly. Freeze before packaging. Pies are easier to wrap after freezing. To serve, let stand at room temperature 15 minutes. Then heat in 350°F oven until warm, about 30 minutes. Otherwise, thaw in the refrigerator. Storage time is 3 to 4 months.
- Unbaked pastry: Make regular pastry or crumb crust. Fit into pie pans. Prick regular pastry. Stack pie pans with two layers of freezer paper between the pans. Put all in a freezer bag. Or store flat rounds on wax covered cardboard separated with two pieces of freezer paper between each. To serve, bake still frozen at 475°F, until light brown, or fill and bake as usual. Storage time is 6 to 8 weeks.

Modified Starches

Modified food starches have specific characteristics that make them desirable for use in home food preservation. ClearJel®, Instant ClearJel®, and ThermFlo® are modified starches. They are made from waxy corn and differ in tolerance to heat and acids, viscosity, and stability. These and similar products are used widely in the commercial food industry and are listed on the ingredient label as modified starch.

ClearJel® works well with acidic ingredients, tolerates high temperatures, and does not weep during storage, but it breaks down if frozen and thawed. It works well for preparing canned pie filling because the sauce remains thin during processing to allow heat to penetrate the jar completely and safely. The filling thickens in the jars after they are removed from the canner. It is the only thickener recommended by the USDA for use in home canning. Care should be taken not to exceed specified amounts of thickener in canning recipes because excess starch can create heat penetration problems during processing and cooling. ClearJel® is not designed for freezing. This type of ClearJel® is sometimes referred to as regular or cook-type ClearJel® to distinguish it from the instant type.

Instant ClearJel® thickens without cooking and will begin to swell as soon as it is added to liquid. It is freezer stable, tolerates high temperatures, and gradually increases in thickness during heating. It may be frozen before or after cooking. When baking with Instant ClearJel®, increase the oven temperature and reduce the baking time to prevent “oven boil out.” Bake or freeze products with Instant ClearJel® soon after preparation to avoid thinning of the product by enzymes on standing. Instant ClearJel® is excellent for use in fruit pies that will be frozen before or after baking. Because Instant ClearJel® thickens without cooking, it is not suitable for canned pie fillings. Sometimes Instant ClearJel® is used without any cooking, such as in a glaze for a strawberry pie, but cooking does increase the thickness of the product.

ThermFlo® provides good body and works well in high- and low-acid foods. It has the strongest freeze-thaw stability of these starches, and it tolerates high temperatures and long processing times. ThermFlo® is an acceptable alternative for canned pie fillings since it is stable during heating and exhibits about the same viscosity during heating as regular ClearJel®. It has the added advantage of holding up well during storage if canned goods are stored in a cold basement. This stability factor allows it to be used in frozen pie fillings.

No starch, modified or regular, should be added to home-canned products unless it is called for in a scientifically tested recipe, and then it should only be used in the amount specified.

The method of adding modified starches to food products varies. ClearJel® and ThermFlo® are combined with cold water or sugar to separate starch granules. Instant ClearJel® is blended with sugar or other dry ingredients before being combined with liquid, and then the fruit and any other ingredients are added.

Although not modified food starches, arrowroot and tapioca starch can also be used to thicken products for freezing, and they yield satisfactory freeze-thaw results. Do not use them in canned pie fillings.

In some areas of the country, modified food starches may be available by other names. Determine the properties of a particular starch before using it in home-canned products.



For additional information about food preservation, visit the Penn State Extension Home Food Preservation website at extension.psu.edu/food/preservation or contact Penn State Extension in your county.

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