



PECTIN INSTRUCTIONS AND RECIPES



877-886-5151

www.pacificpectin.com



WELCOME TO PACIFIC PECTIN

We strive to continually exceed our customer's expectations by offering premium quality products, exceptional customer service and exceeding industry standards in food safety and product innovation.

This little booklet includes:

- *How to create your own recipe.
- *Info and instructions on our top selling pectin blends.
 - *Sample recipes.
 - *Technical FAQs

If you have any questions, we are always here to help.

You can reach us via phone or email.

877-886-5151 support@pacificpectin.com

CREATING A RECIPE

Note: Always use a scale for accurate measurements.

All percentages below are based on weight.

A typical recipe starting point for a standard sugar jam:

53% Sugar • 45% Fruit • 2% Pacific Pectin Mix

(All fruit, juice, spices, your secret ingredients etc. should be included in the 45%.)

Creating your recipe:

First you will need to find your batch weight. Weigh your prepared fruit or juice. Follow the math steps below to find your total batch weight, then you will be able to figure the amount of sugar and pectin needed to complete your recipe:

Weight of fruit \div 0.45 = Total batch weight.

(.45 is the fruit percentage from above formula.)

Example: If you have 65oz of fruit: $65 \div 0.45 = 144\text{oz}$

144oz is your total batch weight.

Now that you know your total batch weight, you can figure out how much sugar and pectin is needed.

Using 144oz as your total batch weight

For sugar amount needed: $144\text{oz} \times 0.53 = 76\text{oz}$ sugar needed.

(.53 is the sugar percentage from above formula)

For pectin amount needed: $144\text{oz} \times 0.02 = 3\text{oz}$ Pacific Pectin Mix needed

(.02 is the Pacific Pectin Mix percentage from above formula)

The same steps can be used for figuring quantities when using our Pacific LM-3 or LM-O Pectin. Simply use the formula percentages given on their information pages.

PACIFIC PECTIN MIX INFORMATION

Usage: 2% of total batch weight.

A typical batch starting point:

53% Sugar • 45% Fruit • 2 % Pacific Pectin Mix

Cook to 65 Brix or 219°F (*sea level*)

(*Deduct 2° for every 1,000 ft. of elevation.*)

Ideal pH for this product is 3.2 at 65 Brix.

Procedure:

(Make sure all jars and lids are clean before starting.)

1. Heat fruit, juice etc. to 140°F
2. Add pectin (and defoamer if needed).
3. Bring fruit and pectin mixture to a boil, boil for 1 minute.
4. Add half of required sugar.
5. Bring back to a boil then add remaining sugar.
6. Bring back to a boil that can't be stirred down.
7. When temperature or Brix is reached, ladle quickly into jars and seal.
8. Invert jars for 3 minutes then turn jars upright and let cool. This step will eliminate the need for a hot water bath.



Note: Use 1/3 cup of Pacific Pectin Mix as a substitute for a box of store bought dry pectin for standard sugar recipes.

PACIFIC LIQUID PECTIN DRY MIX INFORMATION:

Reconstitution instruction:

To make 6 fl. oz. of liquid pectin use: .5 oz. Liquid Pectin Dry Mix pectin and 5.5 fl. oz. of water.
To make 18 fl. oz. of liquid pectin use: 1.5 oz. Liquid Pectin Dry Mix pectin and 16.5 fl. oz. water.

1. Heat water to 180-190°F and put in a blender.
2. Add Liquid Pectin Dry Mix pectin to swirling hot water and blend for 1 minute.
3. Wait 30 seconds then blend for another 30 seconds.

(Reconstituted pectin can be refrigerated and should be used within 24 hours)

Usage: 9% of total batch weight.

A typical batch starting point is:

55% Sugar • 36% Fruit • 9% Liquid Pectin Dry Mix *reconstituted*

Cook to 65 Brix

Ideal pH for this product is 3.2 at 65 Brix.

Procedure:

1. Combine your prepared fruit, juice and sugar in a pot.
2. On high heat, bring fruit mixture to a full rolling boil that cannot be stirred down. Stir frequently.
3. Add reconstituted liquid pectin.
4. Continue hard boil for 1 minute stirring constantly.
5. Remove from heat and ladle quickly into jars and seal.
6. Invert jars for 3 minutes then turn jars upright and let cool.



PACIFIC LM-3 PECTIN INFORMATION

Usage: 3-5% of total batch weight.

A typical batch starting point is:

42% Sugar • 55% Fruit • 3% Pacific LM-3 Pectin

Our LM-3 pectin is designed for low sugar applications ranging from 30 to 55 Brix (sugar content). LM-3 can be used as a direct substitute for any pectin used in a 1/3 less sugar recipe. LM-3 usage amount is typically 3% of batch weight however you can increase the amount for a firmer set or when less sugar is used.

Ideal pH range for this product is 2.9 to 3.5

Procedure:

(Make sure all jars and lids are clean before starting.)

1. Heat fruit, juice etc. to 140°F.
2. Add pectin (and defoamer if needed).
3. Bring fruit and pectin mixture to a boil and boil for 1 minute.
4. Add half of required sugar.
5. Bring back to a boil then add remaining sugar.
6. Bring back to a boil that can't be stirred down and boil for 1 minute.
7. Shut down and ladle quickly into jars.
8. Invert jars for 3 minutes then turn jars upright and let cool. This step will eliminate the need for a hot water bath.



PACIFIC LM-O PECTIN INFORMATION

Usage: 5% of total batch weight.

A typical batch starting point is:

95% Fruit • 5% Pacific LM-O Pectin • Sugar or Artificial Sweetener if desired

(Deduct Sweetener weight from Fruit %)

Our LM-O pectin is designed for low or no sugar applications with an end Brix of less than 30. This includes diabetic and low carb applications.

Ideal pH range for this product is 2.9 to 3.5

Procedure:

(Make sure all jars and lids are clean before starting).

1. Heat fruit, juice etc. to 140°F.
2. Add pectin (and defoamer if needed).
3. Bring fruit and pectin mixture to a boil and boil for 1 minute.
4. Add sweetener (if using any).
5. Bring back to a boil that can't be stirred down and boil for 1 minute.
6. Shut down and ladle quickly into jars.
7. Invert jars for 3 minutes then turn jars upright and let cool. This step will eliminate the need for a hot water bath.



PACIFIC FREEZER JAM PECTIN INFORMATION

Usage: 3% of total batch weight.

A typical batch starting point is:

56% Sugar • 29% Fruit • 12% Water • 3% Pacific Freezer Jam Pectin

Ideal pH for this product is 3.2 at 65 Brix.

Procedure:

(Make sure all jars and lids are clean before starting.)

1. Mix sugar and fruit. Let stand for 10 minutes.
2. In a separate pot, stir Pacific Freezer Jam Pectin into water.
3. Bring pectin/water mixture to a boil while stirring. Boil for 1 minutes.
4. Add pectin/water mixture to fruit/sugar mixture. Stir for 3 minutes.
5. Pour mixture into jars. Let stand for 24 hours, then freeze.



PACIFIC SYRUP PECTIN INFORMATION

Usage: 1% of total batch weight as a starting point.

A typical batch starting point is:

50% Sugar • 49% Fruit • 1% Pacific Syrup Pectin

Ideal pH for this product is 3.0-3.3

Procedure:

(Make sure all bottles and caps are clean before starting.)

1. Dry mix pectin with 2 parts sugar from recipe. Set aside.
2. Heat fruit to 140°F.
3. Add pectin sugar mixture.
4. Bring fruit and pectin mixture to a boil and boil for 1 minute.
5. Add half of remaining sugar.
6. Bring back to a boil then add the rest of your sugar.
7. Bring back to a boil and boil for 1 minute.
8. Skim and fill bottles.
9. Invert bottles for 3 minutes then turn bottles upright and let cool. This step will eliminate the need for a hot water bath.



PACIFIC HM-100 PECTIN INFORMATION

Use for slab jellies

Usage: 2 - 5% of total batch weight.

A typical batch starting point is:

59.6% Sugar • 24% Water • 12% Corn Syrup • 4% Pacific HM-100 Pectin •
.4% Citric Acid
(Sugar for coating)

Finished Brix 78 to 84

Procedure:

1. Mix citric acid with equal parts water from recipe and set aside.
2. Dry mix 1 part pectin with 2 parts sugar from recipe, and set aside.
3. Pre-heat corn syrup to 140°F.
4. Bring remaining water to a boil then slowly add pectin sugar mixture while stirring. Boil for 1 minute.
5. Once pectin sugar mixture is dissolved, gradually add corn syrup and sugar.
6. Add flavor and coloring if used.
7. Cook to between 78 - 84 Brix. (Higher Brix = firmer gel)
8. Add citric acid solution just before you're ready to pour on slab.
9. Pour quickly onto slab.
10. Once cool cut candies and roll or sprinkle with sugar to prevent sticking.



PACIFIC BREAD PECTIN INFORMATION

Advantages of using pectin when making bread:

- * Soft, elastic dough with improved tolerance
- * Improves the freeze-thaw stability dough pieces
- * Increases dough volume
- * Improves crumb moisture
- * Assists with freshness
- * Synergistic effects with insoluble dietary fiber
- * Positive consumer image
- * Contributes to healthy nutrition



Usage: 2% of total flour weight.

A typical batch starting point is:

58% Gluten free flour • 35% Water • 3% Yeast • 2% Pacific Bread Pectin • .8% Salt
• .6% Sugar • .6% Oil

Procedure:

1. Mix all ingredients including water into a kneading kettle and let knead or knead by hand.
2. Remove dough and let stand at room temperature for 20 minutes.
3. Form dough, freeze and pack or proceed as you would with any yeast dough.



STRAWBERRY JAM

Ingredients

- 5 3/4 Cups Strawberries (*crushed*)
- 8 1/4 Cups Sugar
- 1/3 Cup Pacific Pectin Mix
- 2 Tbs. Lemon Juice

Instructions:

1. Place prepared fruit in pot, add lemon juice. (if needed)
2. Heat fruit to 140°F.
3. Add pectin (and defoamer if needed).
4. Bring fruit and pectin mixture to a boil and boil for 1 minute.
5. Add half of required sugar and bring back to a boil.
6. Add remaining sugar and bring back to a boil and heat to 219°F
7. When temperature is reached, ladle quickly into jars and seal.
8. Invert jars for 3 minutes then turn jars upright and let cool.



PEACH JAM

Using Pacific Liquid Pectin Dry Mix

Ingredients:

4 Cups Peaches (*prepared ; see below*)

7 1/2 Cups Sugar

1/3 Cup Lemon Juice

6 oz. Liquid Pectin (*reconstituted*)

Instructions:

Prepare fruit: Blanch. Skin and pit peaches. Cut, slice or chop depending on whether a jam or preserve is desired. The smaller the pieces, the more uniform and firmer the finished product.

1. Combine prepared peaches, lemon juice and sugar in an 8 qt. pot.
2. Over high heat, stirring frequently, bring fruit mixture to a full rolling boil that cannot be stirred down.
3. Add Liquid Pectin.
4. Continue hard boil for 1 minute stirring constantly.
5. Remove from heat, ladle quickly into jars and seal.
6. Invert jars for 3 minutes then turn jars upright and let cool.



“REDUCED SUGAR” BLACKBERRY JAM

Ingredients:

6 Cups Blackberries (*crushed*)

2 1/4 Cups Sugar

2oz. Or 1/3 Cups Pacific LM-3 Pectin

Instructions:

1. Place prepared fruit in pot.
2. Heat fruit to 140°F
3. Add pectin (and defoamer if needed).
4. Bring fruit and pectin mixture to a boil and boil for 1 minute.
5. Add half of required sugar and bring back to a boil.
6. Add remaining sugar and bring back to a boil and boil for 1 minute.
7. Ladle quickly into jars and seal.
8. Invert jars for 3 minutes then turn jars upright and let cool.



“NO SUGAR” STRAWBERRY JAM

Ingredients:

40oz. (5 cups) Strawberries (*crushed*)

16oz. (2 cups) Stevia in the Raw

3oz. (3/4 cup) Pacific LM-O Pectin

Instructions:

1. Place prepared fruit in pot.
2. Heat fruit to 140°F
3. Add pectin (and defoamer if needed).
4. Bring fruit and pectin mixture to a boil and boil for 1 minute.
5. Add Stevia slowly and heat back up to a boil and boil for 1 minute.
6. Ladle quickly into jars and seal.
7. Invert jars for 3 minutes then turn jars upright and let cool.



STRAWBERRY FREEZER JAM

Ingredients:

- 4 Cups Strawberries (*crushed*)
- 8 Cups Sugar
- 2/3 Cup Pacific Freezer Jam Pectin
- 1 1/2 Cups Water

Instructions:

1. Mix sugar and fruit. Let stand for 10 minutes.
2. In a separate pot, stir Pacific Freezer Jam Pectin into water.
3. Bring pectin/water mixture to a boil while stirring. Boil for 1 minute.
4. Add pectin/water mixture to fruit/sugar mixture. Stir for 3 minutes.
5. Pour mixture into jars. Let stand for 24 hours, then freeze.



SYRUP PECTIN

Ingredients:

50 oz. Sugar

49 oz. Strawberries

1 oz. Pacific Syrup Pectin

Instructions:

(Make sure all bottles and caps are clean before starting.)

1. Dry mix pectin with 2 parts sugar from recipe. Set aside.
2. Heat fruit to 140°F.
3. Add pectin sugar mixture.
4. Bring fruit and pectin mixture to a boil and boil for 30 seconds.
5. Add half of remaining sugar.
6. Bring back to a boil then add the rest of your sugar.
7. Bring back to a boil and boil for 1 minute.
8. Skim and fill bottles.
9. Invert bottles for 3 minutes then turn bottles upright and let cool. This step will eliminate the need for a hot water bath.



SLAB CANDY USING PACIFIC HM-100 PECTIN

Ingredients:

- 80 oz. Sugar
- 32 oz. Water or (juice non-concentrated / puree)
- 16 oz. Corn Syrup
- 4.5 oz. Pacific HM-100 Pectin
- .5 oz. Citric Acid
- Flavoring and color as desired

Instructions:

1. Mix citric acid with equal parts water from recipe and set aside.
2. Dry mix pectin with sugar; 1 part pectin with 2 parts sugar from recipe, and set aside.
3. Pre-heat corn syrup to 140°F.
4. Bring remaining water to a boil then slowly add pectin sugar mixture while stirring.
5. Once pectin sugar mixture is dissolved, add remaining sugar, gradually, along with heated corn syrup.
6. Add flavor and coloring if used.
7. Cook to between 78 - 84 Brix.
8. Add citric acid solution just before you're ready to pour on slab.
9. Pour quickly onto slab.
10. Once cool cut candies and roll or sprinkle with sugar to prevent sticking.



BREAD RECIPE

Ingredients:

1000g Wheat Flour or Gluten Free Flour

50g Yeast

15g Salt

10g Sugar

10g Oil

20g Pacific Bread Pectin

610g Water

Instructions:

1. Mix all ingredients including water into a kneading kettle and let knead or knead by hand.
2. Remove dough and let stand at room temperature for 20 minutes.
3. Form dough, freeze and pack or proceed as you would with any yeast dough.

FAQ'S

How should pectin be stored? Pectin should be stored in a cool, dry environment like a lower shelf in your pantry.

What is the shelf life of pectin? Pectin starts to weaken immediately after extraction from citrus peel. It will take approximately 18 months to 2 years before the end user will start to notice weaker gels.

How much pectin should I use?

- * Pacific Pectin Mix and Pacific Pectin Mix- No Acid requires a minimum of 2% pectin content of the total batch weight.
- * Pacific LM-3 requires a minimum of 3% of the total batch weight.
- * LM-O requires a minimum of 5% of the total batch weight.

FYI 1/3 cup dry measure equals 2 oz. Pacific Pectin Mix/No Acid and Pacific LM-3. 1 cup dry measure equals 5 oz. Pacific LM-O.



Can I double my recipe? Yes you can, but keep in mind when doubling your recipe the cook time does not double along with the ingredients. You will however need to cook longer than what the original recipe calls for. For example, if your recipe calls for a one minute hard boil, two minutes for a double batch would be too long. A good rule of thumb is to increase the cook time by 50%. So in this example you would increase the cook time 1 minute 30 seconds. This is not a guarantee it will work, but will give you a much better chance of success.

Can I use a liquid pectin in a dry pectin recipe or vice versa? No. Either recipe would need to be altered to work with either pectin.

Can I use Citric Acid in place of lemon juice to adjust my pH? Yes. A 50/50 solution of citric acid and water is 9 times stronger in acid than lemon juice. You simply take the amount of lemon juice required in your recipe and divide by 9. 1/2 tsp. citric acid + 1/2 tsp water = 4 TB. lemon juice.

Why do my light color jams turn dark? This is generally caused by oxidation. Our **Pacific Fruit Freshener** will slow this process and keep your jams looking brilliant much longer than average.



Why does my jelly or jam not set? Is the recipe you used a proven recipe? If so, than ask yourself, did I follow the instructions correctly? Most failures with proven recipes occur when we deviate from the cooking instructions or the amounts called for in the recipe. If the recipe is not a proven one, we would suggest either doing some research on your recipe or find a proven recipe that will work. You can also refer to our “Creating A Recipe” page and pectin instruction pages in this booklet. If you need further help you can email us at support@pacificpectin.com with your questions and we will connect you with our technical team.

Why does my jelly “weep”? Weeping jelly is most often caused by too much acid in the fruit or recipe in general. A low pH gel is very brittle and will squeeze water out, producing a liquid layer between the jelly and the glass. Solution: raise the pH. This can be accomplished by either omitting or reducing acidic ingredients or adding a buffer like Sodium Citrate. In some cases, switching from our **Pacific Pectin Mix** to our **Pacific Pectin Mix - No Acid** will solve the problem as well.

Why do sugar crystals form on my jelly? This problem is caused by either cooking too long, or having too much sugar in the recipe (brix are too high). Solution: shorten cook time or take some sugar out of the recipe. We would suggest making small changes. Most often it will not require much change to bring the recipe back into balance.



Why do I have mold on my jelly that hasn't been opened yet? This problem can be caused by a few different issues:

- *The jar lid was not completely sealed. Inspect the lid for a bad glue ring and inspect the glass surface for imperfections.
- *The fill temperature was too low. Did you fill at a minimum of 190° F?
- *The container wasn't sterile. Did you clean your jars and lids thoroughly?
- *The sugar content was too low. Sugar is a natural preservative, therefore, if you want to use less than 30% sugar we recommend our **Pacific LM-O Pectin**, which contains preservatives that will lengthen shelf life after opening.

Why does mold grow quickly on my jelly after being opened and in the refrigerator.? This is usually caused by low sugar content in the jelly. The lowest we recommend using is 25% sugar, 70% fruit. If you want to use less than 25% sugar we recommend our **Pacific LM-O Pectin**, which contains preservatives that will lengthen shelf life after opening.





For additional recipes and information,

Please visit our website;

www.pacificpectin.com

