# **Spherificator**®

# *Turning Food Into Pearls* User Manual and Recipe Booklet



# **Spherificator**<sup>®</sup>

Turning Food into Pearls User Manual & Recipe Booklet

#### Spherificator

Designed by Imperial Caviar & Seafood in Canada Assembled in Canada with local & imported components Patent Serial No. 62/239,453 Imperial Caviar & Seafood Inc. 78 Brunswick Blvd., Dollar Des Ormeaux, Quebec, H9B 2C5

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## **1 YEAR LIMITED MANUFACTURER'S WARRANTY**

The Spherificator is covered by a 1 year warranty against manufacturing defects. This warranty covers all electric and electronic components including the motor and pump. In the event that you do experience a problem with your Spherificator within 2 years of purchase you **MUST** contact Cedarlane Culinary directly either by phone (1-866-313-5898) or email (<u>info@cedarlaneculinary.com</u>). A customer service representative will contact you back within 1 business day if you are unable to reach anyone immediately.

#### The manufacturer's warranty will be void if:

- The Spherificator has been tampered with
- The Spherificator is damaged due to water exposure caused by direct water contact
- Misuse of the Spherificator

#### \*DO NOT RETURN TO YOUR POINT OF PURCHASE, CONTACT US DIRECTLY\*

Phone: 1-866-313-5898 (Monday to Friday, 9:00am to 5:00pm Eastern Standard Time)Email: info@cedarlaneculinary.com (24 hours a day, 365 days a year)

## NEVER WASH UNDER RUNNING WATER

- NOT DISHWASHER SAFE
- NOT WATERPROOF
- ALWAYS FOLLOW THE INSTRUCTIONS IN THIS BOOKLET

## PACKAGE CONTENTS

## Your Spherificator package should include:

- ► 1 x Spherificator
- ▶ 1 x Power Cord
- ▶ 1 x Manual and recipe booklet
- ▶ 1 x 70g sodium alginate
- ► 1 x 100g calcium chloride
- ▶ 1 x 100g sodium citrate
- ► 2 x nozzles (different sizes)

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## INTRODUCTION

**Congratulations on purchasing your Spherificator!** You are about to bring your dinner parties to the next level with endless possibilities. Below you will see some images for some ideas of what you can make: we have salsa pearls on fish tacos, ginger pearls on fresh sushi, mango pearls on seared scallops, melon pearls wrapped in prosciutto, and coffee pearls on panna cotta. The 8 small dishes in the top center photograph are (from left to right): coconut, salsa, mango, blood orange, basil, black raspberry, ginger and lemon.



- Basic spherification is ideal to create caviars that will liberate their flavors while bursting in your mouth!
- Principle When a solution containing sodium alginate is dripped into a calcium bath, calcium ions react with alginate molecules by allowing them to align and bind so that a thin gel membrane forms around the droplets.
- ► **Warning** Any percentage of calcium in the ingredient will prevent the spherification process from being completed. The use of demineralized water is recommended, as tap water with a high calcium percentage could cause the sodium alginate solution to jellify.
- Serving and Preservation For an optimal burst-in-mouth effect, serve within 15 minutes. Store the caviar in a container with a lid for a maximum of 24 hours before serving. The caviar will be completely congealed, but it should remain very tasty!
- The interior of a droplet that is being exposed to calcium ions for too long will eventually end up completely congealed. On the other hand, too short an exposition to calcium ions will cause the caviar's membrane to be too fragile and ultimately unable to maintain its shape

## HOW TO OPERATE THE SPHERIFICATOR



2

3

5

6

8

Dissolve  $1-\frac{1}{4}$  teaspoon (2g) of sodium alginate into 1 cup (250mL) of the liquid ingredient.

▶ The use of a hand blender is recommended as some egg beaters will not be powerful enough



Let the preparation sit for at least 15 minutes in order to allow the air bubbles trapped within the solution following the brewing of the preparation to escape

- ► Too many air bubbles will cause the preparation to float when dripped into the calcium chloride bath
- Separately prepare a calcium chloride bath by dissolving 1 tsp (approximately 4.5g) of calcium chloride into 2 cups (500mL) of water; stir with a spoon until dissolved

► Your Spherificator comes with two needle sizes

Pour the preparation containing alginate into the Spherificator

approximately 6 inches and move in a circular motion.

and drip droplets into the calcium chloride bath by pressing

► Hold the Spherificator vertically from a height of

Select a needle and screw into the bottom opening

Strain the sodium alginate mixture through a sieve







Collect the caviar from the calcium chloride bath using

Let pearls sit for 1 minute.

- a slotted spoon or a sieve ► Leaving the caviar to sit in the calcium chloride bath for
  - more than 5 minutes will cause its membrane to begin to thicken until the caviar is completely congealed

Rinse the caviar in cold water

of the Spherificator

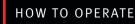
or strainer.

the button

▶ Rinsing the caviar is recommended to remove excess calcium chloride which may have a bitter aftertaste. The jellification process as well as the thickening of the caviar's membrane will continue after rinsing







## IMPORTANT

- ALWAYS clean your device after each usage following our cleaning procedures

   failure to do so can result in a clogged device
- ► Follow guidelines to produce proper solutions for different food products
- ► NEVER wash under running water or in a dishwasher you will burn out the electronic components and the motor of the device
- NEVER add calcium chloride or any product containing calcium in the top funnel of your Spherificator – this will cause the machine to clog. If this happens, please refer to the TROUBLESHOOTING section of this booklet
- If you are using the Spherificator for "reverse spherification", please note that although this is possible it is not the intended use of the machine and will therefore void the warranty
- ► AVOID dropping the Spherificator in the calcium chloride solution if this happens, detach the bottom ring and needle head and wash them thoroughly under clean water. Wipe the body thoroughly as well
- ► If you feel you need to **disassemble** the Spherificator, please carefully follow the instructions on **page 21** of the **TROUBLESHOOTING** section of this manual
- DO NOT operate the Spherificator without the bottom ring this protects the needle head from coming into contact with calcium chloride

## **CLEANING PROCEDURE**

These cleaning procedures take about 30 seconds to perform and **MUST** be done after each usage. Properly cleaning the Spherificator after each usage will extend the life of the product.

- 1. Turn off the Spherificator
- 2. Pour water into the top funnel to the halfway mark
- **3.** With a bottle brush or sponge, rub off all excess alginate solution from the funnel walls
- 4. Pour out the dirty water. If funnel is still dirty repeat steps 2 and 3
- 5. Pour water into the top funnel to the halfway mark
- **6.** Turn on the Spherificator and run device until water comes out clear from the needle tip
- 7. To clean the outside of the Spherificator simply use a damp cloth

## RECIPES



#### INGREDIENTS

- 2/3 cup (15omL) store bought strawberry syrup (or whatever your favorite flavor is!)
- 1 cup (150mL) water
- 1 tsp (3g) sodium alginate
- **¹∕₂** tsp (2g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Strawberry Caviar**

This recipe can be applied to any type of sweet syrup and is excellent on cakes, ice cream, crepes and much more!

- **1.** Place 150mL water and strawberry syrup in a blender and blend for 30 seconds.
- 2. Mix sugar with sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar powder onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- 4. Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain strawberry mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the strawberry solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!

## **Chive Caviar**

An excellent garnish to compliment a soup, chili, or even cheese and crackers!

- **1.** Place 230mL water, salt and chives in a blender and blend on high speed for 20 seconds.
- 2. Mix sugar with sodium alginate.
- 3. With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate/sugar into the water).
- **4.** Let rest 30-45 minutes to allow the air to escape.
- **5.** Strain the chive mixture through a small strainer. Pour into the Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the chive solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!

#### INGREDIENTS

- 1 cup (250mL) water
- 1/2 cup (20g) chives -chopped
- **1/4** tsp (1g) salt
- ¹∕₂ tsp (2g) sodium alginate
- **¹∕₂** tsp (2g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

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3/4 cup (200mL) hot water

10 stems of saffron

- **¹∕₂** tsp (2g) sodium alginate
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## Saffron Pearls

#### *Try these saffron pearls over salmon, rice or chicken! This recipe will work for any kind of flavor infusion with water.*

- 1. Add saffron to hot water and allow steeping for 10 minutes. Stir until the water turns dark yellow with a strong smell of saffron.
- 2. Strain into a blender to remove the stems.
- **3.** With the blades on low speed, sprinkle sodium alginate powder onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the saffron mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the saffron solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!

## **Balsamic Pearls**

#### *Try this recipe as an exciting alternative to salad dressing!*

- **1.** Place 175mL water and sodium citrate in a blender and blend for 30 seconds.
- 2. Mix sugar with sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar powder onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- 4. Slowly add the balsamic vinegar while continuing to mix.
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the balsamic mixture through a small strainer. Pour into the Spherificator.
- **7.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- Press the button on the Spherificator and drop the balsamic vinegar solution into the calcium bath and leave sit for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!

#### INGREDIENTS

- **2∕3** cup (175mL) water
- 1/2 tsp (3g) sodium citrate
- 1/2 tsp (1.5g) sodium alginate
- **1/2** tsp (2g) sugar
- ¹∕₃ cup (75g) balsamic vinegar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl



- 1/2 cup (125mL) water
- 1/2 tsp (3g) sodium citrate
- 1/2 English cucumber, puréed (125g)
- 1/2 tsp (2g) sodium alginate
- **¹∕₂** tsp (2g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Cucumber Pearls**

## *These refreshing pearls would be perfect on smoked salmon, a sandwich, or even in a cocktail!*

- **1.** Place 125mL water and sodium citrate in a blender and blend for 30 seconds. Add cucumber puree.
- 2. Mix sugar with sodium alginate.
- 3. With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the cucumber mixture through a small strainer. Pour into the Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- 7. Press the button on the Spherificator and drop the cucumber solution into the calcium bath and leave to set for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!



#### INGREDIENTS

- 1 cup (250mL) water
- 1 tbsp (10g) ginger, puréed
- 1/2 tsp (2g) sodium alginate
- 4 tsp (15g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water

## **Ginger Pearls**

A new way to eat your ginger with sushi or breathe life into any seafood dish!

- **1.** Place 250mL water and ginger puree in a blender. Blend on low speed.
- **2.** Mix sugar with sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar slowly into the liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate/sugar into the water).
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the ginger mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- Press the button on the Spherificator and drop the ginger solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!

## 10 SPHERIFICATOR RECIPES



- ²∕₃ cup (150mL) water
- 3/4 tsp (4g) sodium citrate
- 1/2 tsp (2g) sodium alginate
- 5 tsp (20g) sugar
- ¹∕₂ cup (100mL) lemon juice
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## Lemon Pearls

#### Add a lemony taste to seafood, salads, drinks and more!

- **1.** Place 150mL water and sodium citrate in a blender and blend for 30 seconds.
- 2. Mix sugar with sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate/sugar into the water).
- **4.** Slowly add the lemon juice while continuing to mix.
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the lemon mixture through a small strainer. Pour into the Spherificator.
- **7.** Dissolve the calcium chloride in water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the lemon solution into the calcium bath and leave sit for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!



INGREDIENTS

- 3/4 cup (200mL) water
- 1/4 tsp (1g) sodium citrate
- 30 mint leaves (10g)
- 1/2 tsp (2g) sodium alginate
- **1∕2** tsp (2g) sugar
- 1/4 cup (50mL) sugar syrup (50/50 water sugar)
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

### **Mint Pearls**

*Try these delicious mint pearls in a mojito or your favorite type of summer cocktail, or even as a garnish on some freshly roasted lamb!* 

- **1.** Place 200mL water, mint and sodium citrate in a blender and blend on high speed for 20 seconds.
- 2. Mix sugar with sodium alginate.
- 3. Reduce speed to low speed and sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate into the water).
- 4. Slowly add the sugar syrup while continuing to mix
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the mint mixture through a small strainer. Pour into Spherificator.
- Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the mint solution into the calcium bath and leave sit for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!



- **1∕2** cup (125mL) water
- 1/2 tsp (3g) sodium citrate
- ¹∕₂ tsp (2g) sodium alginate
- 1/2 cup (125mL) alcohol product (Vodka, Kahlua, Malibu, Rum, etc).
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## Alcohol-based Caviar

Let your imagination run wild! How about a "dry" martini with gin or vodka pearls, or Malibu pearls in a piña colada?

- 1. Place water and sodium citrate in a blender and blend for 30 seconds.
- 2. With the blades on low speed, sprinkle sodium alginate onto the liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate into the water).
- 3. Slowly add the alcohol while continuing to mix.
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the alcohol mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the alcohol solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!



INGREDIENTS

**¹∕₂** cup (125mL) water

- 1/4 tsp (1g) sodium citrate
- 1 tsp (3g) sodium alginate
- 3/4 cups (200mL) whiskey
- **1** tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Whiskey Pearls**

#### Whiskey pearls in a whiskey sour, anyone?

- **1.** Place water and sodium citrate in a blender and blend for 30 seconds.
- **2.** With the blades on low speed, sprinkle sodium alginate onto the liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate into the water).
- 3. Add whiskey and mix thoroughly.
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the whiskey mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the alcohol solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!

## SPHERIFICATOR RECIPES

## **Spherificator**°



- 3/4 cup (200mL) freshly
   brewed coffee
- **¹∕₂** tsp (2g) sugar
- 1/2 tsp (2g) sodium alginate
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Coffee Pearls**

These coffee pearls can be served on cakes, ice cream or even cocktails! This recipe can be applied to any hot beverages not containing milk or calcium products such as tea or apple cider.

- 1. Place coffee in a blender.
- 2. Mix sugar with sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar powder onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the coffee mixture through a small strainer. Pour into Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the coffee solution into the calcium bath and leave sit for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!



INGREDIENTS

- 3/4 cup (200mL) fresh tomato juice
- 1/4 cup (50mL) water
- 1/2 tsp (3g) sodium citrate
- 1/2 tsp (2g) sodium alginate
- **¹∕₂** tsp (2g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## Tomato Caviar

Serve with a large leaf of freshly cut basil on a fresh slice of Mozzarella. Fill the basil leaf with the tomato pearls, add salt and pepper to taste and drizzle with olive oil for a mouthwatering appetizer!

- **1.** Mix 50mL water and sodium citrate in a small bowl until completely dissolved.
- 2. Pour into a blender with freshly crushed tomato juice.
- **3.** Mix sugar with sodium alginate.
- **4.** With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the tomato mixture through a small strainer. Pour into the Spherificator.
- **7.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the tomato solution into the calcium bath and leave to set for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!

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- 3/4 cup (200mL) water
- 1/2 tsp (3g) sodium citrate
- 1/2 tsp (2g) sodium alginate
- 1/2 tsp (2g) sugar
- 1/4 cup (6omL) hot sauce
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Hot Sauce Pearls**

*Try this recipe with your favorite hot sauce and eat it with anything from pasta to hot dogs and nachos!* 

- **1.** Place water and sodium citrate in a blender and blend for 20 seconds.
- **2.** Mix sugar with sodium alginate.
- **3.** With the blender on low speed, sprinkle sodium alginate/sugar onto the liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the alginate/sugar into the water).
- 4. Slowly add the hot sauce while continuing to mix.
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the hot sauce mixture through a small strainer. Pour into Spherificator.
- **7.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the hot sauce solution into the calcium bath and leave sit for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!



#### INGREDIENTS

- **1½** cup (350mL) apricot juice
- **41/4** cups (1L) water
- 1/3 cup (75mL) strawberry jam
- 4 tsp (15g) sugar
- 11/3 cup (320mL) water
- 1 tsp (4g) sodium alginate Champagne to serve
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL water) separate bowl

## Confetti Champagne

Spoon these colorful pearls into a glass of champagne and enjoy a delicious beverage filled with bursts of flavor!

- **1.** Pour apricot juice into a blender.
- **2.** Mix 2 tsp sugar with ½ tsp sodium alginate.
- **3.** With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **4.** Let rest 30-45 minutes to allow all the air to escape.
- **5.** Strain the apricot mixture through a small strainer. Pour into the Spherificator.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- 7. Press the button on the Spherificator and drop the apricot solution into the calcium bath and leave to set for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water, drain and serve!
- **9.** Repeat above steps starting with the jam and the remaining sugar and alginate. You can use the same calcium chloride bath for the strawberry jam pearls as you did for the apricot juice.

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- 1 cantaloupe melon
- 4 tsp (15g) sugar
- 2 cups (500mL) water
- 6 slices prosciutto
- tsp (3omL) olive oil
   Orange zest (to taste)
   Pepper (to taste)
   Olive oil (to taste)
- ¹∕₂ tsp (₂g) sodium alginate
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl



Looking for a super fancy appetizer? Wrap a slice of prosciutto around a crouton of bread to create a bowl shape. Fill this bowl with the melon caviar, garnish with the zest and pepper and drizzle with olive oil.

- 1. Peel the melon and cut it.
- **2.** Place the melon in a blender and blend until a uniform texture is reached. Strain and add 1 cup (250mL) back into the blender.
- **3.** Mix sugar with sodium alginate.
- **4.** With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the melon mixture through a small strainer. Pour into the Spherificator.
- **7.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the melon solution into the calcium bath and leave to set for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!



#### INGREDIENTS

11/4 cups (300mL) water

**7½** tsp (30g) sugar

- 6 tbsp (3og) cocoa powder
- **1¼** cup (300mL) 35% cream
- 1/2 cup (100g) white chocolate
- 1/2 tsp (2g) sodium alginate
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

## **Deconstructed Cocoa**

#### A light dessert that your guests will love!

- **1.** Bring the sugar, cocoa powder and 300mL water to a boil and continue cooking for 2 minutes. Pour into a blender.
- **2.** With the blades on low speed, sprinkle sodium alginate onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **3.** Let rest 30-45 minutes to allow all the air to escape.
- **4.** Strain the cocoa mixture through a small strainer. Pour into Spherificator.
- **5.** Bring the cream to a boil and pour it into a bowl. Chop the white chocolate and mix it in; stir, then set aside until cool.
- **6.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **7.** Press the button on the Spherificator and drop the chocolate solution into the calcium bath and leave to set for 1 minute.
- **8.** Collect the pearls in a strainer, rinse under running water and drain.
- **9.** Pour the white chocolate cream into serving spoons, arrange some cocoa pearls on top and serve.

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- 1/2 cup (100mL) water
- 11/4 cup (300mL) dark rum
- 1 tsp (3g) sodium alginate
- 12 pinches of nutmeg
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

### **Nutmeg and Rum Pearls**

Our holiday special! Best served over eggnog. Please drink responsibly, even though you may not taste as much rum rest assured you are still drinking it.

- 1. Place 100mL water and sodium alginate in a blender and blend for 30 seconds. Let sit 1 minute.
- 2. With the blades on low speed, slowly pour the rum and nutmeg into the spinning liquid. Mix until uniform (or use an immersion blender to mix).
- **3.** Let rest 30-45 minutes to allow all the air to escape.
- **4.** Strain the mix through a small strainer. Pour into the Spherificator.
- **5.** Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **6.** Press the button on the Spherificator and drop the rum solution into the calcium bath and leave to set for 1 minute.
- **7.** Collect the pearls in a strainer, rinse under running water, drain and serve!

## **Avocado Caviar**

Add this vibrant caviar to tacos or use as an exciting twist as guacamole on an appetizer!

- **1.** Place 125mL water and sodium citrate in a blender and blend for 30 seconds.
- **2.** Mix sugar with sodium alginate.
- 3. With the blades on low speed, sprinkle sodium alginate/sugar onto the spinning liquid. Mix until the powder is absorbed by the liquid (or use an immersion blender to mix the sugar/alginate into the water).
- **4.** Continue slowly blending and add the avocado puree and lemon juice. Mix until uniform (again, you can also use a hand blender).
- **5.** Let rest 30-45 minutes to allow all the air to escape.
- **6.** Strain the avocado mixture through a small strainer. Pour into the Spherificator.
- Dissolve the calcium chloride in 500mL water by mixing with a spoon for 30 seconds.
- **8.** Press the button on the Spherificator and drop the avocado solution into the calcium bath and leave to set for 1 minute.
- **9.** Collect the pearls in a strainer, rinse under running water, drain and serve!

#### INGREDIENTS

- **1/2** cup (125mL) water
- 1/2 cup (125mL) avocado puree
- 1 tsp (5mL) lemon juice
- ¹∕₂ tsp (ȝg) sodium citrate
- ⅓ tsp (2g) sodium alginate
- **1∕2** tsp (2g) sugar
- 1 tsp (4.5g) calcium chloride
- 2 cups (500mL) water separate bowl

► The process of turning liquids into caviar-shaped pearls through the spherification technique has been around since the 1950s, but until the invention of the Spherificator you now own it was an extremely arduous, time-consuming and inconsistent task. If you have done it before using a syringe you will be thankful that those times are now behind us and you'll be pumping out all kinds of pearls in no time – but if you are new to the technique and having a little bit of trouble getting a particular ingredient to work this guide has been made specifically for you!

## ► First things first – DO NOT EVER ATTEMPT TO PUT SOLIDS IN THE MACHINE.

This will certainly clog the hosing and likely break the machine. The technique works on liquids only so if you will be using solid ingredients such as mint leaves ensure they are adequately blended into a puree and strained as well as possible before proceeding with the addition of the sodium alginate.

- ► If you are planning on making pearls out of an acidic ingredient such as hot sauce or salad dressing, you will need to use sodium citrate. Other liquids may require sodium citrate as well.
- ► There are three ingredients that came with your Spherificator sodium alginate, calcium chloride, and sodium citrate. The sodium alginate is the thickener that will always be added to your ingredient/liquid going into the top of the machine and the calcium chloride will always be dissolved in the water bath that you will be dropping your pearls into. The sodium citrate is used in conjunction with the alginate to create the right consistency in the mixture, but is not always necessary.

## Your calcium chloride bath will ALWAYS consist of 4.5g (1 tsp) fully dissolved in 500mL of water.

**DO NOT** put calcium chloride in the top of the machine – this will cause gelling in the tubes if it comes in contact with any sodium alginate and your Spherificator could stop working as a result.

If anything is going to give you trouble it will be creating the mixture consisting of your chosen ingredient and the sodium alginate. There is trial-and-error involved whenever you are attempting to spherificate a new ingredient.

- 1 The first thing we always do is judge the consistency of the ingredient. If it is very thick such as chocolate syrup we know that if we add sodium alginate straight into the mixture it will become far too thick to run freely through the machine. Therefore you must dilute this mixture equally with water. If your ingredient is not quite as thick (has a consistency similar to grenadine), we would recommend a 2:1 mixture – two parts grenadine to one part water. For simplicity sake your chocolate mixture would be 15omL syrup and 15omL water. Your grenadine mixture would be 20omL syrup and 10omL water. If you are using an ingredient such as a soft drink that has a high water content already you may be able to get away without diluting or adding any water at all. Just keep in mind that the sodium alginate must be able to bind to water and if there is not enough your mixture will not work.
- 2 Now you are ready to add your alginate! Until you get the hang of it, we will always recommend starting with 2g sodium alginate (1¼ tsp) no matter what your mixture is. Depending on how it turns out from there you will always be able to tweak your results. To add the alginate, measure out 2g using an accurate scale (or 1¼ teaspoons) and then slowly sprinkle it into your mixture as you use a hand blender to thoroughly mix it in. You should begin to see your mixture thicken right away. Once all of your alginate is mixed in you are looking for it to be the consistency of sugary syrup, so not as runny as water but not as thick as Ketchup. Don't worry – you'll get the hang of this and know what to look for in no time! If this is what your mixture looks like you are ready to go on to **Step #5**. If it is too runny go to **Step #3**, if it is too thick go to **Step #4**.

**Spherificator**°

- 3 My mixture is still too runny what do I do? Don't panic, this is an easy fix! Simply measure out some more alginate (usually add a maximum of 0.5-1g at a time) and blend it into your mixture. The more you add the thicker it will get, but don't go overboard!
- 4 My mixture is too thick what do I do? This is occurring for one of two reasons: either you added too much sodium alginate or your ingredient is acidic. Please follow one of the below steps or else you may find your end result looks more like tiny noodles than caviar!
  - **A.** If your ingredient is not acidic and you think you added too much alginate, you can counterbalance this by blending some more water into your mixture. The downside of this is that you will be further diluting the flavor of your ingredient the more water you add, so the sodium citrate method is preferable.
  - **B.** Add sodium citrate. This product has a sour-salty taste so you do not want to add more than you need to however it will neutralize acidic ingredients allowing your solution to be able to flow freely through the Spherificator. To add the sodium citrate, first fully dissolve 1/4 tsp (1g) at a time in as little warm water as possible and then pour into your mixture as you again blend it with your immersion blender. Continue to add one dissolved gram of sodium citrate in this manner until your solution has the required consistency.
- 5 **My mixture is just right.** Congratulations, your mixture is almost ready to be spherificated! We recommend letting it sit for approximately 45 minutes to let the air bubbles escape but this is not always necessary, especially if you strain it thoroughly.
- 6 You can finally add your ingredient mixture in the top of the Spherificator. It will hold up to a maximum of 200mL at a time which will create a lot of pearls. Just pull off the top cap, fill up the inner funnel and put the lid back on. Make sure you are near an outlet as the Spherificator needs to be plugged in to work.

- Separately prepare your calcium chloride bath of 4.5g per 500mL of water in a medium-sized bowl. Ensure the calcium chloride is fully dissolved by mixing in a circular motion with a spoon.
- 8 Hold your Spherificator about 6 inches over the calcium bath and press the button. You will hear it begin to work and there will be a slight delay as it pumps your liquid through the internal hoses. Within seconds it will start rapidly dropping out of the bottom of the machine. Move the Spherificator in a circular motion over the bath and you will notice that each drop that hits the water will immediately pull into a perfect sphere.
- After the pearls have sat in the bath for about 1 minute or so, use a strainer to lift them out of the calcium bath. You can also pour the contents of the calcium bath through a strainer into another similar-sized container as this is the easiest way to capture the pearls while keeping your calcium bath prepared for the next batch of pearls. Give them a quick rinse off with water to remove any extra calcium and they are ready to serve!



**Spherificator**°

If your Spherificator isn't working, first ask yourself the following two questions so you can establish what is wrong with your device:



Does the red light on the plug turn on?

Does the motor turn on, can you hear it running?

Check to make sure that the red light on the plug is on indicating that it is properly plugged in and receiving power. If it does turn on, press the "ON" button on the Spherificator and listen to whether the motor turns on and you can hear it running. If you answered "NO" to either of these questions, please contact Cedarlane Culinary immediately either toll-free at 1-866-313-5898 or through email at info@cedarlaneculinary.com and a customer service representative will assist you in fixing the issue or arranging a replacement to be sent.

If you answered "YES" to the top two questions, your machine isn't working for one of three possible reasons:

- Your mixture is too thick refer to page 18 of this manual (step 4).
- 2
- The machine was not properly rinsed out and the hose has been clogged
- 30
  - One of the hoses has become somehow pinched at a certain point

The same solution applies if you are experiencing either #2 or #3:

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## DISASSEMBLING YOUR SPHERIFICATOR



Remove top and bottom covers



2 Remove the two silicon rings from the bottom and from the top



Pinch the middle of the Spherificator along the separation line until an opening is made. Using a flat screwdriver or a butter knife pry open the Spherificator in two – this should be relatively easy to do



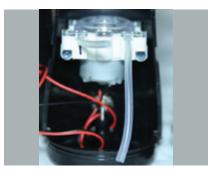
At this point you will see the interior of the Spherificator and you will have 4 parts: the front and back of the Spherificator, the top cone and the bottom nozzle

## **Spherificator**°

## DISASSEMBLING YOUR SPHERIFICATOR

- Using a marker, make a little mark on the side of the hose connecting to the top cone. This way you will reassemble the right hose to the right component
- 5 Disconnect the top and bottom silicon hose from the stainless tips





- 6 You will see three wheels in the pump; two of these wheels are pinching the hose. Gently pull the hose from one end until you see the pinch. If you are pulling more than 1" (2cm) and can't see the pinch, it is on the other side. Pull the hose from the other side and locate the pinch.
- 7 To release the pinch, simply hold both sides on the pinch and pull gently. This will release it.





## **REASSEMBLING YOUR SPHERIFICATOR**

8 Connect the marked side of the hose to the top cone and the other side to the bottom stainless steel connector



Reassemble all four components and clip back together









Put top and bottom covers back on



**Spherificator**°

## FAQ



I heard you can make pearls out of alcohol such as vodka, rum, whiskey and gin... is this true?

Absolutely! You just need to separately blend your sodium alginate into water before adding the alcohol because otherwise it will not mix. We suggest mixing 2 parts alcohol to 1 part water for the alginate to properly bind, so a 40% alcohol beverage will turn into roughly 27% alcohol pearls. Please drink responsibly, even though you may not taste as much booze rest assured you are still drinking it!

## ?

Why do my pearls taste salty?

*There is probably some excess calcium from the water bath on them – try giving them a more thorough rinse.* 

? Why does my "caviar" look more like tiny noodles than caviar?

Your mixture is too thick – try adding water or some sodium citrate as outlined in Step #4 on page 19 of this manual.

How do you clean the Spherificator?

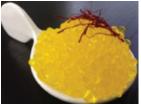
Simply empty out any ingredient left in the top of the machine and then put some water in the top and run it through until pure water starts coming out of the bottom. Cleaning your Spherificator is **VERY IMPORTANT** as if alginate is left in the hoses it will continue to gel over time until it becomes clogged. Now you're ready to blow the socks off your dinner guests with incredible presentations of an endless variety! As a quick recap, here are some ideas we covered...

Strawberry pearls on cheesecake

Coffee pearls on ice cream Cucumber pearls on smoked salmon Chive caviar on cheese and crackers











Nutmeg and rum pearls over eggnog Whiskey pearls in a whiskey sour Balsamic caviar on a on a Greek salad







Ginger pearls on fresh sushi Lemon caviar on seafood Mint caviar on roast lamb



Saffron caviar over chicken and rice Hot sauce caviar on nachos Avocado pearls on tacos

*To reorder powder such as sodium alginate, calcium chloride or sodium citrate:* 

Please contact **Cedarlane Culinary** toll-free at **1-866-313-5898** or email **info@cedarlaneculinary.com** or visit us at **www.cedarlaneculinary.com**!

## Happy Spherificating!!

## **Spherificator**<sup>®</sup>

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