

Spectra S2

Hospital Grade
Double Electric Breast Pump



USER MANUAL

Welcome to your Spectra Breast Pump

Congratulations on becoming the owner of a Spectra S2 hospital grade double electric breast pump. Your Spectra S2 is designed to make life easier for you, with a host of features to ensure effective expressing. If you have any questions about using your Spectra S2, please check our website for more information or get in touch any time.

FEATURES:

- **Double-sided pumping** – your Spectra S2 comes with everything you need for double pumping. Expressing from both breasts at the same time saves you time and better supports milk supply.
- **Letdown mode** – switch with a touch to the letdown mode, which is a light, quick mode designed to speed the start of milk-flow, just the way your baby does.
- **Fully adjustable cycle and vacuum settings** – touch button controls allow you to easily adjust the cycle and vacuum levels until you find what works best for your body.
- **Night light** – choose from two different light levels in the Spectra S2's integrated nightlight, a feature you will love when pumping at night.
- **Stylish, portable design** – Spectra have endeavored to make the most portable and convenient hospital grade pump ever, with integrated handle and bottle stand to make life a little easier.

www.spectra-baby.com.au

Table of Contents

Important Safeguards	3
Your Complete Spectra S2	4
Getting Started with your Spectra S2	5
Understanding the Settings on the Spectra S2	11
Washing, Sterilising & Product Care	13
Tips for Expressing Breastmilk	15
Breastmilk Storage Guidelines	16
Troubleshooting	17
Warranty	18
Product Specifications	18

www.spectra-baby.com.au

Important Safeguards



Please make sure you follow the guidelines below to use your Spectra breast pump safely.

Hygiene

- Your Spectra breast pump is a closed system, meaning that a barrier between the pump motor and your breast milk ensures hygiene and allows for safe multi-user use. However, the milk collection kits provided should only be used by one person.
- Always follow the directions in this manual for cleaning and storage of your breast pump and parts.
- Failure to follow the guidelines provided or use of this breast pump with attachments not recommended by the manufacturer may pose a health risk and will void the warranty.

Pain or Discomfort

You should not experience pain or discomfort when using your Spectra breast pump. Do not turn the suction level above your comfort level. If you experience pain or discomfort, stop using the breast pump and seek help from your care provider or the manufacturer, as appropriate.

Safety Guidelines for Electrical Devices

This product is an electrical device and the following safety guidelines apply:

- Always unplug electrical devices after use.
- Do not use while bathing or in or around water.
- Do not use, place or store product where it can fall or be pulled into water or any other liquid.
- If product falls into water or any other liquid, do not reach for it. Unplug immediately.
- Do not use this product if it has a damaged cord or plug, or if it is not working properly.

General Safety Guidelines

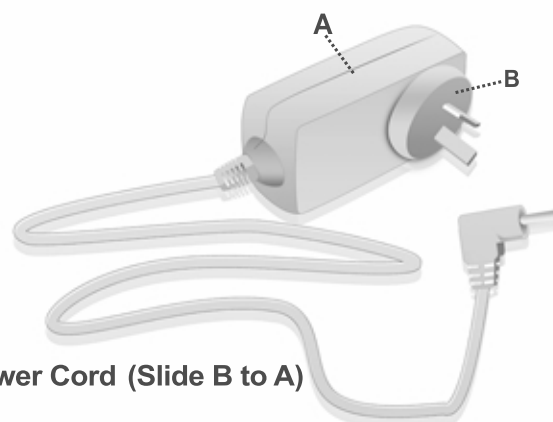
- Close supervision is necessary when used near children or invalids.
- Use the product only for its intended use and with attachments recommended by the manufacturer.
- Handle the power cord, adaptor and plug with care - do not leave on a heated surface do not pull on or twist the power cord, do not wrap the cord around the adaptor body.
- Do not use in the presence of concentrated oxygen or pressurised gases.

www.spectra-baby.com.au

Your Complete Spectra S2



Pump Motor



Power Cord (Slide B to A)



Bottle Sealing Disc (x 2)



Slow Flow Soft Teat (x 2)



Bottle Cap (x 2)



Breast Shield (x 2)



Valve (x 2)



Backflow Protector (x 2)



Tubing (x 2)



Bottle (x 2)

Milk Collection Kit

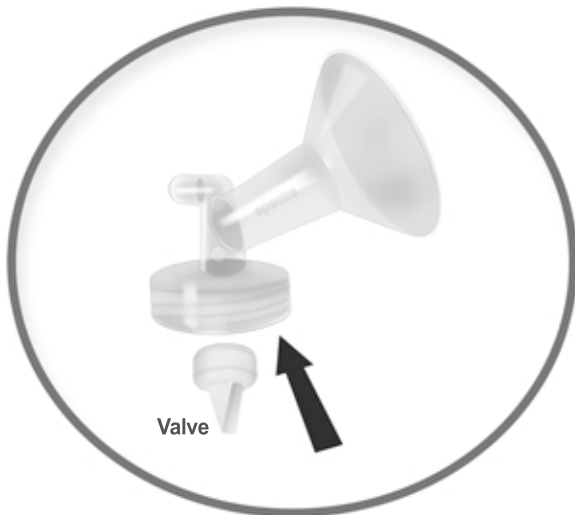
The parts above are assembled to make your milk collection kit, which is the parts you need to put together and use when you're expressing. You may see us referring to the milk collection kit throughout this manual.

www.spectra-baby.com.au

Getting Started with your Spectra S2

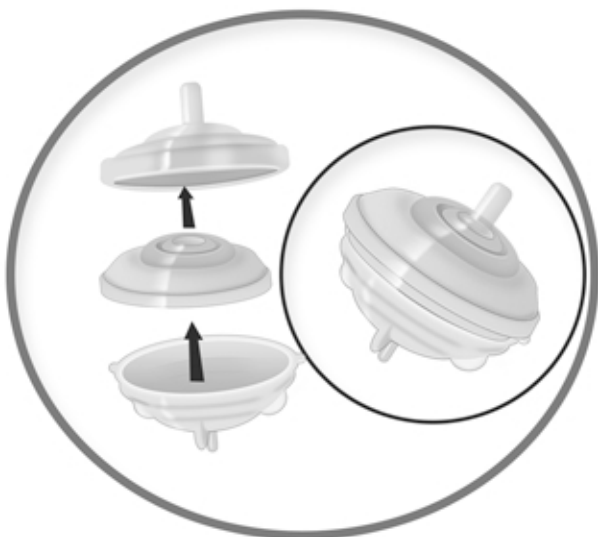
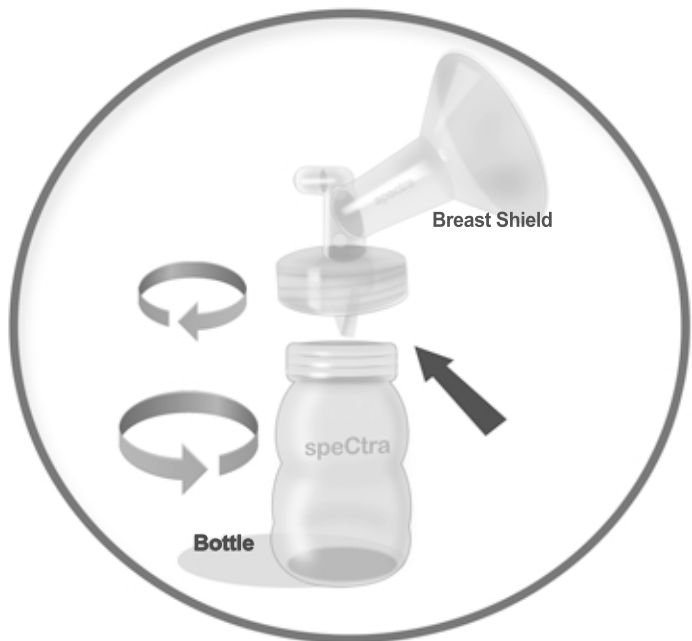
Preparing for first use

Before using your Spectra S2 for the first time, you will need to sterilise all parts, other than the pump motor and tubing. Please do not sterilise the pump motor or tubing. For more information on sterilising and washing the parts that come with your Spectra S2, please refer to page 13.



1. Attach the valve to the underside of the breast shield.

2. Screw the milk collection bottle to the breast shield.



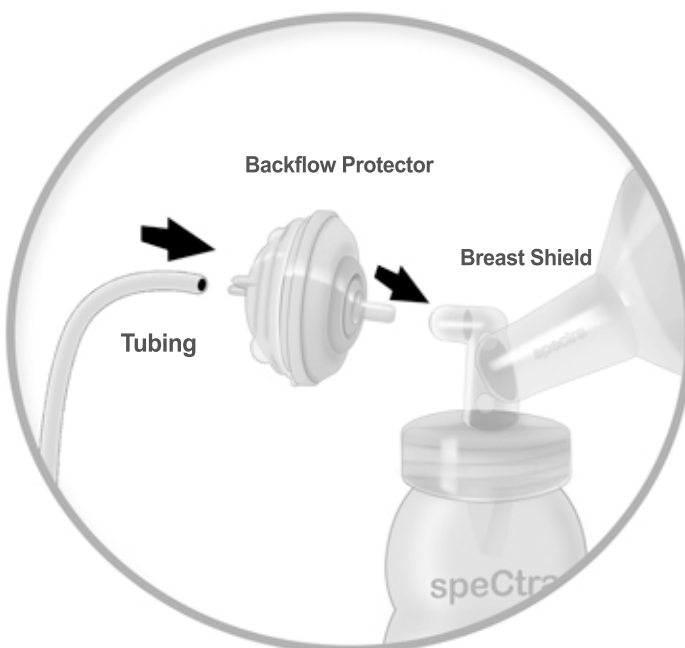
3. Assemble backflow protector.

www.spectra-baby.com.au

Getting Started with your Spectra S2

4 ■ Fit backflow protector to the breast shield and connect tubing.

Important: Make sure you always use the backflow protector, otherwise milk can flow down the tubing into the pump motor. This can damage the motor and compromises hygiene. Failure to use the backflow protector will void your warranty.



Repeat the process for both milk collection kits if double pumping.

www.spectra-baby.com.au

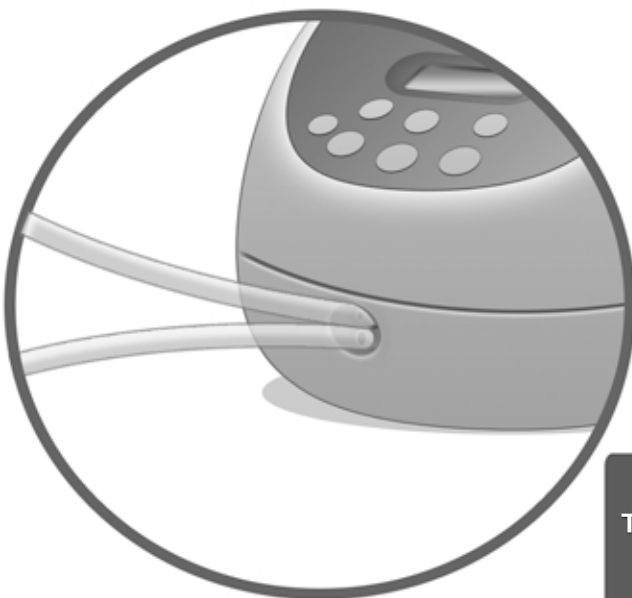
Getting Started with your Spectra S2

Connect Milk Collection Kit to Pump

Single Pumping

- Connect tubing to air nozzle on front of pump motor.
- Ensure that cap is secured over unused air nozzle.

Tip - Make sure the cap is secured firmly enough over the unused air nozzle that no air can escape, but not so firmly that it is difficult to remove.



Double Pumping

- Remove cap from second air nozzle.
- Connect tubing from each milk collection kit to an air nozzle.

Tip - Double pumping is more effective for most women at building milk supply, and is a great way to save time. It is normal to notice that suction reduces when double pumping - just turn the vacuum settings higher to compensate. Hold one breast shield to your breast with your forearm and the other with the hand of the same arm to keep one arm free when double pumping. If you are expressing frequently, you may wish to invest in a handsfree pumping bra.

www.spectra-baby.com.au

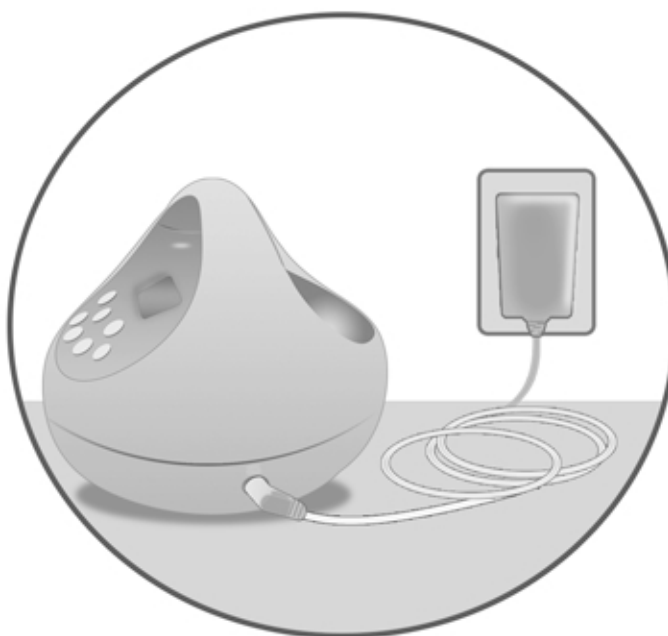
Getting Started with your Spectra S2

Connect Power Cord



1. Plug the electrical cord to the power jack of the pump motor.

2. Plug the other end of the electrical cord to any standard electrical outlet.



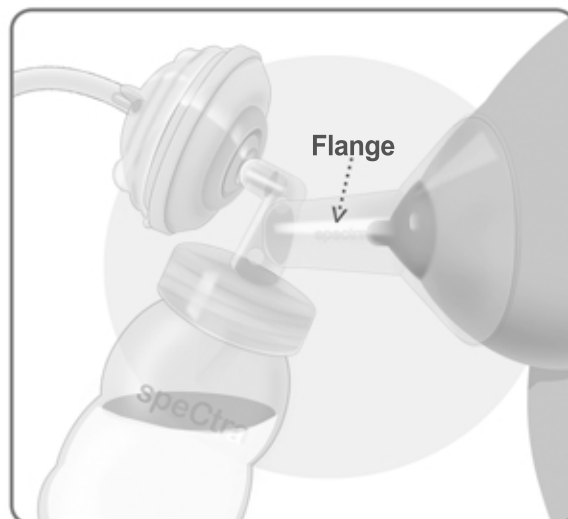
Tip - Your Spectra S2 can be used with any standard 12V car adaptor purchased from a reputable supplier if you need to pump on the move.

www.spectra-baby.com.au

Getting Started with your Spectra S2

Guide to Expressing

1. Centre the breast shield on your breast so that the nipple is drawn into the flange. It's important that your breast shield is positioned correctly before pumping begins in order to avoid any pain that may result due to rubbing or twisting of your nipple onto the side of the flange. If double pumping, place the second breast shield in place as well. Never remove the breast shield from your breast when the pump is still powered on, as this may cause discomfort.



2. Press the Power  button. The Spectra S2 will start in Expression Mode.

Tip: Your Spectra S2 will start on the last settings you used for Expression Mode. You may wish to start pumping on a lower vacuum setting. If so, adjust the pump settings **before you attach the breast shield to your breast**.



3. Press the Massage/Expression  to switch to Massage Mode. Once milk is flowing, press the Massage [image] button to switch to Expression Mode. Massage Mode is a light, fast program that mimics the way your baby initiates letdown (the start of milkflow). Expression Mode is a slower, stronger program that mimics the way your baby draws milk out once milk has started flowing.

Tip: If your milk flow slows while you are expressing, switching back to Massage Mode may help trigger another letdown.



www.spectra-baby.com.au

Getting Started with your Spectra S2

Guide to Expressing

- 4.** Adjust vacuum (the strength of suction)   to comfort level. You may wish to start low and then increase to comfort level. Never set high enough to cause discomfort.

Adjust cycle (the speed of the suction)   to find what works best for you.

Tip: Experimenting with the pump settings to find what works best for you can really pay off.

- 5.** When you wish to stop expressing, first press the Power  button, then remove milk collection kit from your breast. Never remove the milk collection kits from your breast when the pump is still powered on, as this may cause discomfort.

NOTE: The Spectra S2 has an auto-shutoff feature that will turn the pump off automatically after 30 minutes of use, for your safety.

- 6.** Disconnect the backflow protector from the breast shield. Carefully pour expressed breast milk into your chosen, sterilised storage container, or store directly in the bottle after sealing with the bottle sealing disc. Once you have finished expressing, disassemble and wash all parts following instructions on page 13.



www.spectra-baby.com.au

Understanding the Settings on the Spectra S2

Using the Cycle and Vacuum Settings on your Spectra S2

Vacuum Settings

NOTE

The Spectra S2 will remember your settings automatically for your next session. If you want to start pumping on different settings to those you finished with in your previous session, adjust the settings before you start expressing.

The vacuum level on your breast pump refers to the suction strength, or how strongly the pump will 'suck'. This is measured in mmHg. When you are using your Spectra S2, you will usually find that expressing is most effective on the highest vacuum level that you are comfortable with. However, **it's important not to set vacuum level so high that it makes you uncomfortable, as the resulting pain will hinder your milk flow.**

Start off with the vacuum low, and then gradually increase the vacuum setting to your comfort level. You may find that the level of vacuum that you are comfortable with varies a lot, from day to day, during the day and even during the same expression session.

Adjust the vacuum level by pressing the



buttons.

Cycle Speed Settings

The cycle speed on your Spectra S2 refers to the how many times the pump 'sucks' and releases per minute; this is measured in cpm (cycles per minute). Your Spectra S2 has been designed with variable cycle settings so that you can find the setting that suits your body best.

Changing the cycle speed can make a dramatic difference to successful expressing for some women. Every woman is different, so experiment to find what speed works best for you.

Adjust the cycle speed by pressing the



button.

Massage and Expression Modes

Your Spectra breast pump has unique flexible program settings designed to mimic the way that your baby feeds and help your body adjust to expressing milk with a breast pump.

Massage mode

The Spectra Massage Mode mimics the way that your baby feeds to trigger a letdown. This is the physiological process that occurs when your body starts the flow of milk. The Massage Mode uses light suction and fast cycle speed of 70 cpm (cycles per minute) to gently initiate milkflow.

Tip: As a general rule, the longer you have been breastfeeding (i.e., the older your babies are or the more babies you have had) the more you will benefit from the massage mode.

Expression mode

Once milk is flowing, your baby will start sucking more slowly and deeply, creating a stronger suction to draw out the milk. Your Spectra breast pump mimics this process in Expression Mode. This mode has a slow cycle speed and higher vacuum level. You will adjust the cycle speed and vacuum level in Expression Mode to best suit your body.

Tip: Some women like to switch back to massage mode several times during a pumping session, to kickstart extra letdowns and boost the amount of milk they can express.

www.spectra-baby.com.au

Washing, Sterilising & Product Care

Quick Guidelines for Breast Pump Parts

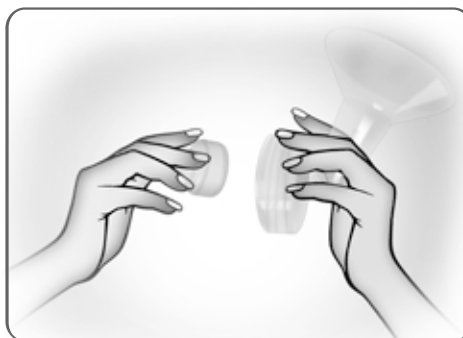
- You should sterilise all parts (other than the pump motor and tubing) before first use. See page 14 for more information on sterilising.
- You do not need to sterilise parts used with breastmilk after every use. Thorough washing with hot soapy water and air dry after each use is sufficient. You may wish to sterilise now and then to ensure fat residue is removed. See page 13 for more information on washing parts used with breastmilk after being used.
- You do need to sterilise breastmilk storage containers that will be used to store and freeze breastmilk, such as bottles. Spectra milk storage bags come presterilised.

**These guidelines are for use for a healthy, full-term baby and assume that you have access to good quality water. If your baby is premature or has health challenges then your care provider may provide alternative advice. If you live in an area without potable water, you should always sterilise parts before use. Always follow the advice of your care provider.*

Washing Breast Pump Parts



1. Wash your hands.



2. Disassemble all parts and wash in hot, soapy water and then rinse thoroughly in hot water. The dishwasher is fine for all parts except the valve.



3. Use a bottle brush to ensure that there is no milk residue anywhere in the parts. Try to be careful with the valve, as it is the most fragile part of the kit.

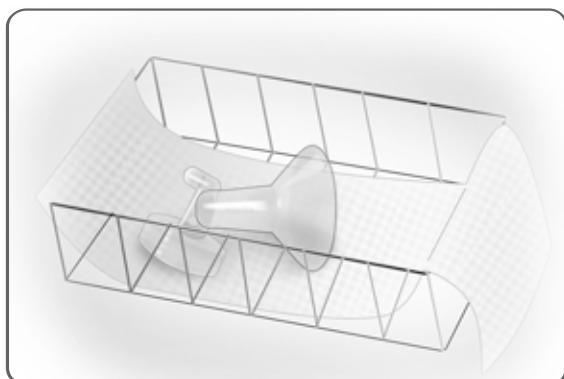


4. Do not wash the valve in the dishwasher. Flush the valve with hot soapy water and carefully remove any milk residue with a bottle brush.

www.spectra-baby.com.au

TIP: Ensure that your valve and other parts are completely dry before your next pumping session. Moisture on the valve can cause it to fall off during pumping.

Washing, Sterilising & Product Care



- 5.** Place parts on a clean rack or clean paper towel to air dry after washing. Do not use cloth to dry your breast pump parts as they may harbour bacteria that can contaminate breastmilk.

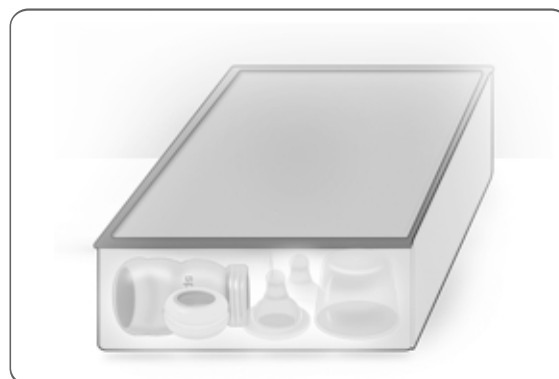
Try not to touch the inside of any parts that will come into contact with breastmilk.



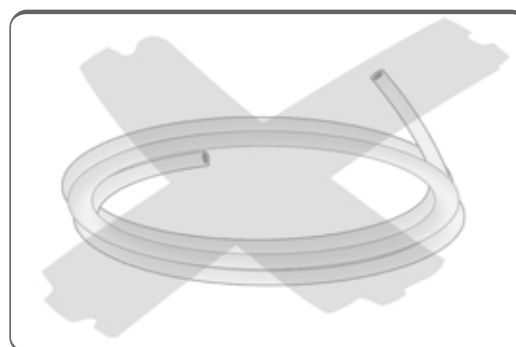
- 7.** Never immerse your pump motor in water. Wipe clean with a damp cloth as needed.



- 9.** The backflow protector does not need to be washed after each use. If you notice moisture in the backflow protector, disassemble and wash each of the three parts separately. Reassemble once completely dry.



- 6.** Store parts in a clean, closed container (e.g. snaplock bag or clean plastic tub with a lid).



- 8.** Never wash or sterilise the tubing. Tubing does not need cleaning unless milk has entered the tubes. If milk should somehow enter your tubing, submerge in hot and soapy water and rinse in hot water and allow to dry hanging vertically.

TIPS

- If pumping multiple times per day, you can save time washing by rinsing your milk collection kit using cold water, and then storing the kit in a clean, closed container (eg snaplock bag or clean plastic tub with a lid) in the refrigerator until the next use. Once a day, wash the equipment thoroughly with detergent and hot water and rinse it well with hot water.
- If pumping very frequently, i.e. 'power pumping' (pumping for a short time several times an hour to boost supply) then you can use your milk collection kit without washing for up to 4 hours of use. Just place the milk collection kit in the refrigerator after every pumping session in a clean, closed container.

www.spectra-baby.com.au

Washing, Sterilising & Product Care

Quick Guide to Sterilising

You can use any method you like to sterilise the parts of your Spectra S2. Please remember that you do not need to sterilise the tubing (or pump motor). In most cases, you do not need to sterilise every time you use your breast pump. You do need to sterilise all parts (except tubing and pump motor) before first use.

Please be aware that there is no method of sterilising at home which can ensure that a milk collection kit is safe for use by multiple users. A fresh milk collection kit should be supplied for each user.

Boiling

- Place all the equipment in a large saucepan and cover with tap water.
- Check there are no air bubbles inside bottles or other parts.
- Place the lid on the saucepan and bring to the boil.
- Boil for five minutes, making sure that the pot doesn't boil dry and melt the equipment.
- Turn off the heat and allow to cool.

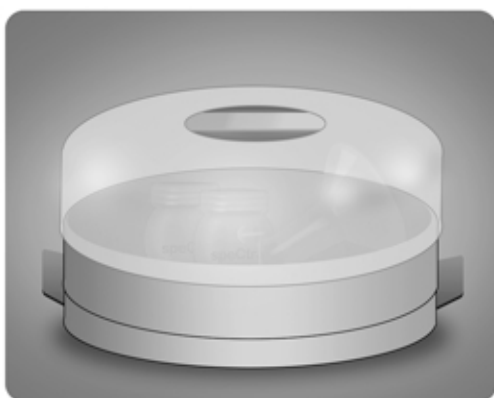
Tip - Make sure parts are not crowded in the pan, as warping may occur if parts press against each other.



Chemical Solutions (e.g. Miltons)

Follow the directions to make up the chemical solution. Always follow the manufacturer's directions if they differ from the information below.

- Make up a fresh solution every day.
- Make up the solution in a large, clean plastic container.
- Separate the equipment and place into the chemical solution squeezing the solution through the teats to make sure they are not blocked.
- Check there are no air bubbles inside the bottles.
- Completely cover the equipment in the chemical solution. If they float to the top, place something heavy (like a plate) over them.
- Don't put anything metal (knives, spoons) in the chemical solution.



Steam Steriliser

Follow the manufacturer's directions.

Tip - Frequent microwave sterilising of breast pump parts and bottles may cause discolouration. This does not affect usage or safety of the parts.

www.spectra-baby.com.au

Tips for Expressing Breastmilk

1. **Relax and be hydrated.** As much as possible, minimise interruptions and ensure you won't be bothered for the next 15-30 minutes. Set yourself up with a glass of water and snacks.
2. **Set the stage—have a regular pumping location.** Choose a seat that is comfortable and provides back support so you can relax while still sitting up straight. Keeping a small towel nearby will help you clean up drips or worse, spills!
3. **Routine and Ritual.** You can condition your body to express easily by pumping with the same set up each time. Maybe try to always use the bathroom, fix your favorite drink, grab your clean milk collection kits, then sit down in your regular spot, have your drink and then start pumping. Try always expressing after brushing your teeth, or playing the same app on your phone while you express. Your body will start to recognise what's going on.
4. **Visualise success!** Just as ritual can help contribute to effective pumping, some creative visualisation can also help. Think of a gushing tap, a flowing river or simply visualise your milk coming out.
5. **Remember who you are pumping for.** Some women find a picture of baby, a baby item or item of clothing that smells of baby can help. Some find that a recording of baby's cry is a powerful letdown trigger.
6. **Massage to start.** Stimulating your breasts before pumping can ease letdown. Rub in small circles all around the breast (don't forget up in your armpit!) on both sides before you turn your pump on.
7. **Massage to continue.** When you notice your milkflow starting to slow, massaging your breast, focussing on any areas that seem to still contain milk, can sometimes restart milkflow or encourage another letdown.
8. **Pump more often.** Increasing the frequency of your pumping sessions rather than the amount of time you pump is generally more effective at increasing the volume you can express.
9. **Pump on schedule.** Pumping at the same time each day can help teach your breasts to be ready to let the milk flow. Some women find pumping in the morning brings about the biggest 'payoff' while others pump after their little one's bedtime, a much more relaxed time of day.
10. **Free a hand.** With practice, you may be able to use a cushion or the crook of your arm to support one milk collection kit while you hold the other. This gives you a free hand to turn pages, scroll down screens, use the remote. If you are serious about getting things done while pumping, a hands-free pumping bra will free up both your hands.

When you express and how often will depend on your specific situation. We have provided some basic directions here, but you may wish to ask your care provider for additional help. More information is also provided on our website and through customer support.

www.spectra-baby.com.au

Breastmilk Storage Guidelines

	Preferred storage duration	Acceptable storage duration
Fresh Breast Milk		
At room temperature (26 C or below)	4 hours	8 hours
In the cooler with an ice-pack	12 hours	24 hours
In the back of the refrigerator	3 days	8 days
Frozen Breast Milk Prior to Feeding		
At room temperature (26 C or below)	None- should be thawed in the refrigerator	None- should be thawed in the refrigerator
In the cooler with an ice-pack	Until thawed	Until thawed
In the back of the refrigerator	24 hours	48 hours
Fresh Breast Milk after Feeding		
At room temperature (26 C or below)	1 hour	2 hours
In the cooler with an ice-pack	Up to 4 hours	Up to 4 hours
In the back of the refrigerator	Up to 24 hours	Up to 24 hours
In the freezer	Should not be frozen	Should not be frozen
Previously Refrigerated or Frozen Breast Milk after Feeding		
At room temperature (26 C or below)	1 hour	1 hour
In the cooler with an ice-pack	1 hour	2 hours
In the back of the refrigerator	1 hour	2 hours
In the freezer	Do not refreeze	Do not refreeze

Important



- Do not refreeze previously refrigerated breast milk once thawed.
- Do not heat or microwave breast milk as much of its nutritive value will be lost and hot spots can occur and result in serious burns.

To thaw the frozen breastmilk

There are three ways to thaw frozen breastmilk safely:

- Move it to the refrigerator 24 hours prior to feeding.
- Hold the bottle or bag under warm running water until the milk is thawed and reaches room temperature.
- Place in a bowl of very warm water and gently move around in the bowl until thawed, refreshing the warm water as it cools.

www.spectra-baby.com.au

Troubleshooting

Problem	Possible Reason	Solution
Pump will not turn on	Not connected to power	Correctly plug into working electrical outlet
Pump will not turn on and a loose rattling sound is heard	Internal circuit board has come loose	Contact Customer Service
Pump turns on but there is no suction	Internal tubing has come loose	Contact Customer Service
Pump turns on but there is low suction	Vacuum setting has been accidentally changed	Adjust vacuum settings
Low suction	Valve is not correctly seated	Reseat the valve correctly
Low suction	Valve is torn or broken	Replace the valve
Low suction	Backflow protector is incorrectly assembled	Reassemble and reattach the backflow protector
Low suction	Tubing is not fully attached	Firmly attach to both the backflow protector and the pump nozzle
Low suction	If single pumping, nozzle cover is loose	Ensure 2nd pump nozzle is fully covered
Low suction	Tubing is damaged	Replace tubing
Low suction	Air is leaking out between breast and the breast shield	Adjust breast. If persists, breast shield may be the wrong size.

www.spectra-baby.com.au

Warranty

This product is warranted by the manufacturer and its authorised representatives to be free from defects in material and workmanship for a period of two years from date of purchase. This warranty does not cover damage caused by accident, misuse, abuse, improper maintenance, unauthorised modification, or connection to an improper power supply.

If you need assistance with correct usage, care or warranty when using this product please contact:

Spectra Baby Australia

www.spectra-baby.com.au

Product Specifications

Vacuum strength	300mmHg
Grade	Hospital Grade
Letdown mode	Yes
Cycle speed	5 speed settings between 38 and 54 rpm
Power	Mains only
Double kit	Yes, comes with everything needed for double pumping
Weight	2kg
Warranty	2 Years
Motor life	1500 Hours
Country of origin	South Korea
Certifications	CE, FDA, ISO13485, ISO9001

www.spectra-baby.com.au