

# BrewKeg10<sup>™</sup> User Guide

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# **OVERVIEW**

## BrewKeg10<sup>™</sup> Structure





# PROCESS SUMMARY

### CLEAN

- on. Rinse off the internal yeast ring—ensure the internal surface is visibly clean.
- o2. Add hot water and detergent—shake with lid on—take some liquid out the beer line.
- o3. Open the vessel butterfly valve and add remaining detergent to the sediment bottle.
- o4. Rinse the detergent from the BrewKeg10<sup>™</sup>, its lid, sediment bottle and beer line.

### MIX

- o1. Add the extracts to the vessel with hot water and stir to dissolve.
- 02. Add any extra ingredients (e.g. hop tea).
- o3. Top up with water. Target 25°C (77°F) when full. Stir.
- o4. Rehydrate yeast in sediment bottle in 25°C (77°F) water and add to vessel.
- 05. Attach sediment bottle and open vessel valve.
- o6. Top up again, attach lid, set VPRV to approx.
  2.5 turns and set temperature to ideally
  25°C (77°F) or within the range of 18-28°C
  (64-82°F) in your fridge or room.

### ADILIST

- 01. Maintain temperature for 4 days.
- o2. Check and adjust the pressure as required after 24 hours. Target 1.5 bar (22 psi).
- o3. Chill to 1-4°C (34-39°F) when fermentation is finished.
- o4. Clarify beer—2 step process. Cider does not require clarification.

### **DISPENSE**

- o1. Close the vessel butterfly valve and remove the sediment bottle.
- o2. Ensure CO<sub>2</sub> is connected to the gas-in port on the lid.
- os. Connect draft tap to the beverage-out port on the lid and pour a beverage.

Transfer the beverage to bottles or kegs if required.



# BREWKEG10™ USER GUIDE

### INTRODUCTION

The BrewKeg $10^{TM}$  User Guide provides you the basic information you need to:

**CLEAN:** Prepare your BrewKeg10<sup>™</sup> for use; **MIX:** Create a beer from your ingredients; **ADJUST:** Ferment and then clarify the beer ready for drinking;

**DISPENSE:** Enjoy your finished product—a chilled, carbonated and clear beer or cider.

### **VIDEO RESOURCES**

There are a series of instructional videos under the <u>Video Resources</u> option off the main menu on the WilliamsWarn website. Please step through these videos at your leisure before you make your first beer or cider to support the content you read within the Quick Start guide.

You can scroll to specific videos, search by title or use the tags to filter those videos relevant to your needs. If you choose the tags of  $\underline{BrewKeg10}^{TM}$  and  $\underline{QuickStart}$  when searching, you will find the videos that support the content of this guide.

You will also find a wide range of videos to assist with techniques, tips and tricks, recipe ideas how-to's and more. We encourage you to bookmark this site and work your way through all relevant videos.

NOTE: you may find that in some instances the videos do not match exactly the instructions within this guide. It is worth noting that there are multiple ways to achieve the steps below and they are all correct. So, consider your options and do what works best for you.

### IMPORTANT VIDEOS TO WATCH

- Connecting Gas and Liquid Correctly
- Disassembling and assembling the BrewKeg lid
- BrewKeg Easy Cleaning
- Dispensing from a BrewKeg
- Doing a basic brew
- Successfully pouring your beer
- Using the new Sodastream adaptor
- □ The BrewKeg: Step 1 Clean
- □ The BrewKeg: Step 2 Mix
- The BrewKeg: Step 3 Adjust
- The BrewKeg: Step 4 Dispense

### **EQUIPMENT YOU NEED**

You will need the following items to make and enjoy your own beer or cider:

- A BrewKeg10<sup>™</sup>
- · Sundry Accessories
  - spatula to mix
  - Clarification Agent
  - Brewery Detergent
  - non-scratch sponge
- A jug or kettle to boil water or very hot water, 80°C plus (176°F)
- · A pair of scissors
- A bucket or plastic jug
- A Dosing Device to add the Clarification Agent
- A Pressure Gauge used to monitor pressure during fermentation
- Beer or cider ingredients for the BrewKeg10™
- A warm environment to ferment (18°C-28°C ideally, (65°F-83°F)) or a WilliamsWarn BrewSnug10<sup>™</sup> to keep your BrewKeg10<sup>™</sup> at a set fermentation temperature
- · A Kegerator or fridge for chilling your beer
- A CO<sub>2</sub> Gas Bottle (or Sodastream gas bottle with Sodastream adapter) with CO<sub>2</sub> regulator and gas line connector
- · A beer tap to dispense your beer



# **CLEAN**

The cleaning process requires the BrewKeg10<sup>™</sup> and all parts to be: cleaned with cold water (removing all visible brewing residues), washed with Brewery Detergent (removing unseen build up), rinsed (removing all Brewery Detergent residue), and sanitised with boiling water. Once this is done you are ready to mix in your ingredients.

- 01. Boil 2L (0.5 gal.) of water, ready for use later.
- 02. Disassemble BrewKeg10™ into individual parts: lid, silicon lid seal, Variable Pressure Relief Valve (VPRV), beer tube, black anti-block fitting (on end of plastic beer line) and sediment bottle.



Fig 1: Disassembled BrewKeg<sup>™</sup> Lid

- 03. In a sink, jug, or small bucket, add 1 teaspoon (0.17 fl. oz.) of detergent per litre of hot tap water. Soak all disassembled lid parts and sediment bottle in hot water, wiping clean with the non-scratch sponge to remove any visible yeast/krausen/hops residue of previous brew.
- 04. Rinse the entire BrewKeg10<sup>™</sup> with cold water over a drain or sink. Using the non-scratch sponge remove the yeast ring, krausen and hops residues at the BrewKeg10<sup>™</sup> fill mark. Pay special attention to the underside of the seal area and bottom valve area. Turn the BrewKeg10<sup>™</sup> over and clean the underside of the bottom valve.

- Ensure it is thoroughly clean before closing the bottom valve and pouring a small amount of boiling water into the underside of the closed bottom valve to sanitise.
- 05. Return to upright position and re-rinse with cold water. Open the bottom valve to drain excess water.
- 06. Re-assemble lid, beer tube, anti-block fitting, and VPRV. Ensure the anti-block opening is facing inward and beer tube is inserted firmly into the lid beneath the correct port (Liquid Port marked 'L').
- 07. Turn the VPRV to fully closed position.
- 08. Install sediment bottle and fill BrewKeg10<sup>™</sup> with 1.5L (1.6 qt.) of hot water and add 1 teaspoon (0.17 fl. oz.) of brewery detergent.
- 09. Fill jug again and boil 2L of water (0.5 gal.), ready for use later.
- 10. Install lid with silicon seal properly. The small tabs on the silicon seal should line up with the seams down the long length of the lid. Shake vessel upright, inverted, and on its side for at least 10 seconds.
- 11. After every 4-5 uses of the BrewKeg10™ it is a good idea to run the Brewery Detergent through your Beer taps. Attach draft beer taps and flush beer line and beer out port with the hot detergent.

NOTE: Enough pressure should build up via shaking of boiling water in the BrewKeg $10^{\text{to}}$  to allow flushing of the beer line. If there is not enough pressure, attach  $CO_2$  gas cylinder Gas-Disconnect (Grey) to the gas port (marked with a 'G' on the lid) and pressurise slightly to 0.3 bar (5 psi). The correct methods for connecting and disconnecting your gas and liquid disconnects to your BrewKeg $10^{\text{to}}$  lid can be found in the <u>Video Resources</u> on the WilliamsWarn website.

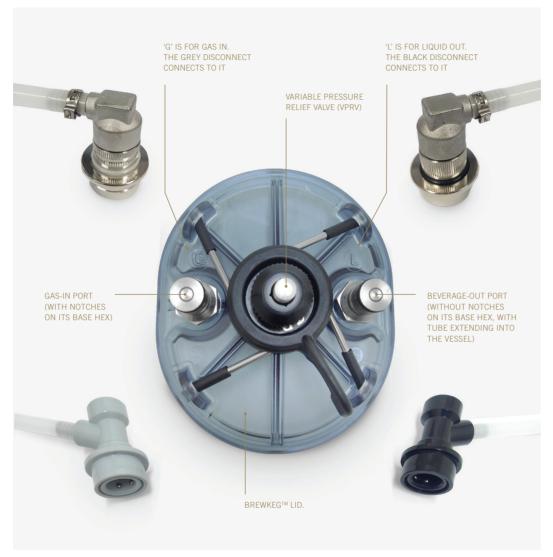


Fig 2: Assembled BrewKeg<sup>™</sup> Lid

- 12. Remove any pressure in the vessel by pressing the button on the VPRV. Remove lid, sediment bottle and drain BrewKeg10™.
- 13. Rinse sediment bottle in cold water thoroughly.
- 14. Rinse lid in cold water and place upside down on bench.
- 15. Open butterfly valve and rinse out BrewKeg10<sup>™</sup> again to remove all the detergent residue.
- 16. Close butterfly valve.
- 17. Fill BrewKeg $10^{™}$  with 4L (1 gal.) of boiling water.

- 18. Install lid with silicon seal properly and shake upright, inverted and on its side for at least 10 seconds.
- 19. Connect CO₂ briefly to pressurise if required before connecting beer tap lines to flush with remaining boiling water from inside the BrewKeg10™. (Run through beer lines until it runs hot).
- 20. Remove any pressure in the vessel by pressing the button on the VPRV.
- 21. Remove lid and place upside down on bench before draining the BrewKeg $10^{TM}$ .

# MIX

The mixing step combines all ingredients for your brew together into the BrewKeg10™. Fermentation commences once the base ingredients are mixed in, the BrewKeg25™ is sealed, and the wort (ingredients and water) have been introduced to the yeast. For specific details on how to create advanced recipes, steep hops or grain, add fruit to ciders, and more please refer to the <u>Video Resources</u> on the WilliamsWarn website.

- 01. Boil 2L (0.5 gal.) of water.
- o2. Fill sediment bottle two-thirds full (500ml or 17 US fl. oz.) with warm and cold tap water. Aim for 25°C (77°F), 20-30°C (68°F-86°F) is acceptable. Do not allow temperature to be above 40°C (104°F) or you may kill the yeast.
- 03. Rehydrate the yeast:
  - A. Open the yeast sachet and tip contents into the sediment bottle.
  - B. Swirl around gently for 30 seconds. Place sediment bottle on the bench.
- 04. Ensure Bottom Valve on BrewKeg10<sup>™</sup> is closed.
- 05. For WilliamsWarn Cider brews:
  - A. Open the cider pouch with scissors.
  - B. Empty contents into BrewKeg10™.
  - c. Add 1L (1 qt.) of boiling water.
  - D. Add any other extra ingredients (fruit syrups etc. as per recipe).
  - E. Top with cold water to 10L (2.64 gal.) mark.

NOTE: You are aiming for  $25^{\circ}\text{C}-30^{\circ}\text{C}$  (77°F-86°F) and no higher than  $40^{\circ}\text{C}$  (104°F).

F. Stir well.

- 06. For WilliamsWarn Beer Kits:
  - A. If you are steeping hops, put some of the boiled water aside for steeping your hops so that it can cool to 80°C (176°F) and re-boil the jug. Information regarding steeping hops can be found in the <u>Video Resources</u> on the WilliamsWarn website.
  - B. Ensure valve is closed then pour 1L (1 qt.) of boiling water into the Brew-Keg10<sup>™</sup> to commence the mixing process.
  - c. Open the can of liquid malt extract (LME) and tip contents directly into the BrewKeg10<sup>™</sup> (warming the can in hot water will make the malt less viscous for a better pour). Fill the emptied LME can half way with boiling water, stir and tip into BrewKeg10<sup>™</sup> to get all remaining malt from can.
  - D. Stir well with spatula to dissolve malt especially around the bottom of the cone.
     Malt will dissolve to a liquid.
  - E. Add cold water to approximately halfway full. You are aiming for approximately 40°C (104°F) (±10°C) (±18°F) as an optimal temperature to mix dry malt ingredients.
  - F. Add the 645g (1.42lb) bag of dry malt extract (DME) to the BrewKeg10<sup>™</sup> and stir to break down the lumps. Some lumps may remain and that is okay, they will break down naturally.
  - g. Add any extra ingredients (e.g. hop tea via strainer or additional malts).



Fig 3: BrewSnug10<sup>™</sup>

H. Top up with cold water to the 10L (2.64 gal.) mark on the side of the vessel. Target temperature is 25°C-30°C (77°F-86°F) when full.

NOTE: The fill line is 6cm (2.4 inches) below the vessel rim. You can make a mark 6cm (2.4 inches) from the top of your spatula handle to provide a guide as you fill the BrewKeg $10^{\rm TM}$ .

- I. Stir thoroughly.
- 07. Attach sediment bottle with rehydrated yeast. Ensure it is tightened comfortably with your

hands but not over-tightened. Open vessel butterfly valve slowly to introduce the mixed ingredients to the yeast.

- 08. Install the lid and lid seal and set the VPRV to 4 half turns anti-clockwise from fully closed.
- 09. Set temperature to ideally 25°C (77°F) or within the range of 18-30°C (64-82°F) in your BrewSnug10™, refrigerator with temperature control, closet, or room.



# **ADJUST**

# There are two key processes in the adjust phase: Fermentation and Clarification.

### **FERMENTATION**

- o1. Attach the WilliamsWarn Pressure Gauge to the gas port (marked with a 'G') on the BrewKeg10<sup>™</sup> lid to monitor pressure through the fermentation and clarification process. You will want your fermentation to read 1.5 bar (22 psi) after 24 to 36 hours and then, ideally, maintain this pressure. It is good practice to remove the pressure gauge once you are comfortable with the pressure attained in your BrewKeg10<sup>™</sup> and re-attach to check as required. Please review the **APPENDICES** for options relating to fermentation pressure.
- 02. Adjusting the VPRV pressure set point: If required, once your BrewKeg10<sup>™</sup> contains CO<sub>2</sub> pressure from yeast activity (after 24-36 hours), you may increase the pressure set point by turning the VPRV valve clockwise or you can decrease the set point pressure by turning the VPRV valve anti-clockwise. You may relieve pressure by pressing the silver button in the centre of the VPRV valve.

NOTE: Removing too much pressure quickly while the ferment is in full swing could result in foaming out of the VPRV.

03. Maintain fermentation temperature between 18-28°C (65-82°F) for approximately 4 days or until fermentation has completed.

Note: A completed fermentation can take longer for higher alcohol beverages and take less time with certain yeast strains, so 4 days is a guideline. A lack of yeast activity appearing in the sediment bottle is the key indication as to whether a fermentation has complete.

- 04. Check your sediment bottle for activity daily.
- 05. It can be useful to shine a torch through the side into the top, clearest part of the sediment bottle to assess activity. The activity in the sediment bottle will go through various stages as the beverage ferments and clarifies:
  - A. Yeast activity, lots of fine bubbles.
  - B. Yeast sediment compacted, no activity.

Fig 4: Sediment Bottle Activity Phases Ale – left bottle. Lager – right bottle.



STAGE A: Fermentation Day 1. Close inspection will show many fine bubbles rising from the yeast.



STAGE B: Fermentation Day 4.



STAGE C: After first clarification.



STAGE D: 24 hours after second clarification. Note compacted layers and clear beer that appears in top of sediment bottle.

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- D. Second clarification complete, clear beer present in top of sediment bottle.
- o6. The final stages of fermentation can be seen when there are a few fine bubbles or the occasional yeast 'bombs' rising from the yeast bed in the sediment bottle. Shortly following this you will see a clear layer of compacted sediment with cloudy liquid above it. There will be no sign of yeast activity after your fermentation is complete.
- 07. If you think fermentation may not be complete, it is always safe to wait an additional day.
- os. Once fermentation is complete, it is time to chill your beverage to prepare it for clarification.
- 09. Move your BrewKeg10<sup>™</sup> to your refrigerator and chill your beer or cider to 1-3°C (34-37.5°F).
- 10. Wait 6 hours for the vessel and liquid to cool before commencing clarification.

NOTE:  $CO_2$  pressure indicated on the Pressure Gauge will reduce slightly as  $CO_2$  is absorbed from the head space of the BrewKeg10<sup>TM</sup> into the cooled beverage.

### **CLARIFICATION**

### CIDER CLARIFICATION

Cider does not need to be clarified. It clears naturally within 24-36 hours, the closer to  $1^{\circ}$ C (34°F), the more efficient the clarification. Once the cider is clear, you can progress to the **DISPENSE** stage.

### **BEER CLARIFICATION**

You may need to dump your sediment bottle prior to commencing the clarification step if your sediment bottle is more than half full. This may occur if you are brewing a high alcohol beer or one with many steeped hops. If required, please follow the instructions regarding dumping of the sediment bottle.

- o1. Prepare your gas bottle, regulator and gas line.
  Set your gas bottle outward pressure to 1.1 bar
  (16 psi). Refer to WilliamsWarn <u>Video Resources</u>
  to set up and use your gas bottle.
- 02. Wind the VPRV valve to a fully closed position and close the bottom valve.

- o3. Unscrew the lid of the Dosing Device and measure 15ml (0.5 fl. oz.) of Clarification Agent into the device. Screw the lid back on.
- 04. Connect the Gas-Disconnect (Grey) fitting from the gas bottle to the lid of the Dosing Device.
- 05. Press the VPRV valve on the BrewKeg10<sup>™</sup> lid until the pressure gauge reads 0.6 bar (9 psi).
- o6. Connect the Liquid-Disconnect (Black) fitting from the Dosing Device to the liquid out post on the BrewKeg10<sup>™</sup> (marked 'L' on the lid). The difference in pressure ensures the Clarification Agent immediately bubbles through the liquid. You should hear the bubbling.
- 07. Keep the Liquid-Disconnect (Black) attached until the pressure in the BrewKeg10™ is the same as the gas bottle (1.1 bar / 16psi), then disconnect from the BrewKeg10™.
- 08. To flush the Clarification Agent residue from the dosing device add 30ml (1 fl. oz.) of cold water to the dosing device, install the lid and shake to clean all surfaces, before connecting back to the liquid out post and flushing the water into the BrewKeg25™ by releasing a small amount of pressure from the vessel while it is connected to the Gas-Disconnect (Grey). Let the pressure equalise back to 1.1 bar before disconnecting.
- 09. Disconnect the Dosing Device from the gas line and liquid post and remove the pressure gauge.
- 10. Connect the Gas-Disconnect (Grey) of the gas bottle to the gas post on the BrewKeg10<sup>™</sup> set at 1.1 bar (16psi).
- 11. Open the bottom valve. The beer will now clarify and dump a new layer of yeast and haze into the sediment bottle.
- 12. You will see a separation of clearer beer and sediment appearing in your sediment bottle.
- 13. After 12 hours, repeat steps 3-12 with 10ml (0.34 fl. oz.) of Clarification Agent.
- 14. A third yeast and haze layer will fall into the sediment bottle over the next 24 hours.
- 15. When you see a clear line of crystal clear beer above the compacted sediment in your sediment bottle, you are now ready to enjoy your beer!



Fig 5: Dosing Device setup

### **DUMPING THE SEDIMENT BOTTLE**

It may be necessary to dump the contents of the sediment bottle to make room for additional sediment. This may occur due to extra ingredients being added and therefore the sediment bottle filling past half full during the fermentation. The best time to dump the sediment bottle is after the beverage has been chilled but before the first clarification.

- i. Ensure the BrewKeg10<sup>™</sup> sediment bottle is accessible. If the BrewKeg10<sup>™</sup> is currently inside a BrewSnug10<sup>™</sup>, refrigerator or cupboard, assess whether you should move it to better location.
- ii. Completely close the butterfly valve at the base of the BrewKeg10 $^{\text{TM}}$ .
- iii. Place a dish or alternative container underneath the sediment bottle to catch any potential spillage.
- iv. Unwind the sediment bottle slowly.

- v. Dump the contents of the sediment bottle down the drain and rinse the sediment bottle with warm water so that it is visibly clean.
- vi. Connect your beer tap to the BrewKeg10<sup>™</sup> and dispense beer from your BrewKeg10<sup>™</sup> directly into the sediment bottle until it is full. It may be predominately foam that is poured from your BrewKeg10<sup>™</sup> however that is not a concern. The objective here is to fill the sediment bottle so that when it is re-attached to the BrewKeg10<sup>™</sup>, no oxygen is introduced to the beer.
- $_{\text{vii.}}$  Carefully attach your sediment bottle to your BrewKeg10 $^{\text{\tiny{TM}}}$ . It should be firmly tightened with your fingers but not overtightened.
- viii. Slowly open the butterfly valve to re-introduce the fermented beverage into the sediment bottle.

# **DISPENSE**

Ensuring a good pour is a combination of beverage and beer line temperature, level of beverage carbonation, and pouring pressure.

- o1. The gas remains connected to the BrewKeg10<sup>™</sup> from the previous Clarification steps, set at 1.1 bar (16 psi).
- 02. Provided the BrewKeg10<sup>™</sup> remains under 5°C (41°F), it is okay to leave the sediment bottle attached with the bottom valve closed while dispensing. If you want to remove and dump the sediment bottle, take the BrewKeg10<sup>™</sup> to a sink or drain, close the bottom valve and remove the sediment bottle. It screws off clockwise as you are looking down at it.
- o3. If removing the sediment bottle under pressure, it will overflow and need to be in a suitable area to deal with hosing off the yeast sediment and up inside the bottom valve before rinsing the sediment bottle and re-installing it. Leave the bottom valve closed.
- 04. Connect the black fitting of your draft beer tap to the liquid out post on the BrewKeg10<sup>™</sup> (marked with an 'L'). This could be a Kegerator beer tap, a plastic beer tap, or some other mechanism.

- NOTE: Ensure your beer lines are chilled from being contained within your fridge prior to pouring. If you use a Kegerator ensure your fan has been on and the font is cool to touch. Cold beer will froth if it travels through warm beer lines.
- 05. Your cold, clear, carbonated beer is ready to pour. Enjoy!

NOTE: If you find the carbonation level is a too high for your personal preference or you are seeing too much froth in the beer glass (a symptom sometimes of very hot days and un-chilled beer lines), you can refer to the **APPENDICES** in this document on pressure, temperature and carbonation and adjust accordingly.

- 06. You can transfer the beverage to bottles or kegs if required. Simply follow supplied instructions and refer to the <u>Video Resources</u> on the WilliamsWarn website.
- 07. Once the beer is dispensed it is best to leave the  $BrewKeg10^{TM}$  chilled until you intend to clean it.

WARNING: If removing the BrewKeg10<sup>™</sup> from the fridge while the sediment bottle is full, ensure that the bottom valve is in the open position to avoid pressure building up in the sediment bottle.



# **APPENDICES**

### Special Note on Pressure and Carbonation

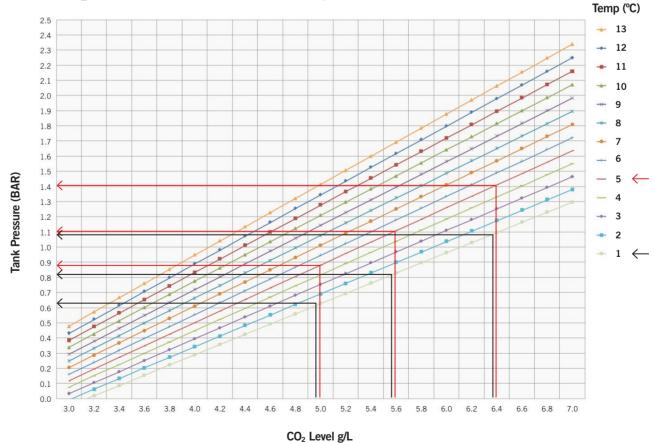
Beverage	Typical Grams per Litre (g/L) CO <sub>2</sub>
British Ales	3.0 - 4.0
Porter, Stout	3.5 - 4.5
Belgian Ales	4.0 - 4.5
American Ales	4.5 - 5.5
European Lagers, Belgian Lambics	5.0 - 5.5
Some Lagers, New World Ales	5.5 - 6.0
Cider and Mead	Still - 8.0
American Wheat	5.5 - 6.5
German Wheat Beers	6.5 - 8.0

Historically the amount of  $\rm CO_2$  in a beer has depended on its beer style and this ranges from 3g/L to 8g/L. We've found over the years that WilliamsWarn brewers like to target around about 6–6.4g/L  $\rm CO_2$  in their beers.

Beverage	Typical Serving Temperature
British Ales	1 – 7°C / 34 – 45°F
Porter, Stout	1 – 8°C / 34 – 46°F
Belgian Ales	6 – 10°C / 43 – 50°F
American Ales	7 – 13°C / 45 – 55°F
European Lagers, Belgian Lambics	5 – 16°C / 41 – 61°F
Some Lagers, New World Ales	10 - 15°C / 41 - 59°F

The typical serving temperature for beers also has a historical basis and ranges from  $1^{\circ}\text{C}-15/16^{\circ}\text{C}$  (34°F–59/61°F). The brewers in New Zealand, Australia and the USA tend to like the colder beers, so we've targeted  $1^{\circ}\text{C}$  (34°F) as the starting point for these instructional manuals.

### CO<sub>2</sub> Levels From Pressure vs Temperature



on this graph, we need a pressure of 1.1 bar during dispense. So that's why we set 1.1 bar pressure on the low pressure gauge on our  $CO_2$  supply regulator.

### **Adjusting Carbonation**

Carbonation	g/L CO <sub>2</sub>	Pressure on CO <sub>2</sub> Supply for Clarification and dispense (1°C/34°F)
High	6.4 g/L	1.10 bar
High	6.2 g/L	1.03 bar
High	6.0 g/L	0.96 bar
Moderate	5.8 g/L	0.90 bar
Moderate	5.6 g/L	0.83 bar
Average	5.4 g/L	0.76 bar
Average	5.2 g/L	0.70 bar
Average	5.0 g/L	0.63 bar
Low	4.8 g/L	0.56 bar
Low	4.6 g/L	0.49 bar

If you find this high carbonation level is a little bit too high for your personal preference, or you are getting a little too much foam out of the draft beer tap, then for your next brews just target a lower dispense pressure. For example 0.9 bar will give you 5.8g/L carbon dioxide. So that is what you would set on the low pressure gauge on your CO<sub>2</sub> supply. During fermentation set your VPRV to release at about 0.4 bar higher than the dispense pressure you've chosen to allow for a pressure drop during cooling and to have a little excess carbonation in the beer before clarification. Also when you press the button on the VPRV to reduce the pressure in the vessel before you dose in the clarification agent, lower the vessel pressure to 0.5 bar lower than the dispense pressure you might be choosing from this table, to be able to force the agent into the beer.

### Carbonation for Warmer Beverages

Carbonation	g/L CO <sub>2</sub>	Pressure on CO <sub>2</sub> Supply for Clarification and dispense (5°C/41°F)
High	6.4 g/L	1.41 bar
High	6.2 g/L	1.34 bar
High	6.0 g/L	1.26 bar
Moderate	5.8 g/L	1.19 bar
Moderate	5.6 g/L	1.11 bar
Average	5.4 g/L	1.03 bar
Average	5.2 g/L	0.96 bar
Average	5.0 g/L	0.88 bar
Low	4.8 g/L	0.81 bar
Low	4.6 g/L	0.73 bar

Please note, if you prefer a warmer beverage temperature at dispense, for the same amount of carbonation you need more pressure. So choose the amount of carbonation you want and use the graph on the left to set the dispense pressure you need. If you find your beverage is over carbonated to your personal taste or maybe over foaming through your beverage tap system, put the pressure gauge back on and open the VPRV up to a lower pressure and let it stand overnight. This will reduce the carbonation level. If you're short of time, you could try shaking the keg a little bit to help force the  $\mathrm{CO}_2$  out of the beverage.

### A Simple Rule of Thumb

If you like the level of carbonation that 1.1 bar (16 psi) gives you at 1°C (34°F), but would like a warmer beer, a simple rule of thumb is to try 1.2 bar at 2°C (35.6°F), or 1.3 bar at 3°C (37°F),

or 1.4 bar at 4°C (39°F), or 1.5 bar at 5°C (41°F). This works well for those who like a high carbonation level and it will not result in foaming of the beer out the tap when the beer is poured.



# FINAL WORDS

These instructions represent a means for anyone to make great beer or cider the first time they use a BrewKeg10™. As you brew more, you may find you come up with your own tweaks to what is written here or develop radically different methods that suit you better. As long as you and your friends are happy with the final beer or cider, feel free to make you own adjustments to the process if you feel the need or see an easier way to brew using your set up.

# **NOTES**



# **NOTES**

# **NOTES**

