



## Starter Kit Instruction Manual

(for 30L flat-bottom with tap model)

This instruction sheet contains vital information that is related to the safe usage and handling of the FermZilla Uni Tank. It is vital that you read this instruction sheet from front to back before using the product! THIS IS FOR YOUR OWN SAFETY



Simple to use and easy to clean.



## WARNINGS

1. Do not add any liquid which is above 50°C (122°F) to the Fermzilla. Only clean, wash or sanitise the fermenter with cold water.
1. This is **not** a pressure vessel. Under no circumstances apply more than 0.15bar (2PSI) to the fermenter tank. We strongly recommend not adding pressure to this fermenter. Our **All Rounder** or **Unitank** models are designed from the ground up as pressure capable fermenters.
2. If the fermenter is scratched, damaged or has been under any physical duress; do not use the fermenter under any pressure.
3. Keep the fermenter out of direct sun or heat. Do not expose to UV rays of any sort.
4. If you are using a heat belt to warm the fermenter then only have the heat belt sitting below the liquid level. Do not use an unregulated heat source, only use heat sources which are plugged into a temperature controller set below 45°C.
5. Do not use Sodium Metabisulphite or Stellarsoda in the FermZilla. Only use chemical cleaners and sanitizers that are approved by Kegland. These include:
  - a) Super Kill Ethyl Sanitiser Spray (effective for santising the exterior of the FermZilla) (KL05371)
  - b) StellarSan (mixed to the correct specification) (KL05357)
  - c) StellarClean (not to be left in the FermZilla for more than 30 minutes) (KL05494)... Or contact [www.kegland.com.au](http://www.kegland.com.au) for more information regarding other compatible chemical cleaning products.
6. Don't StellarClean in the fermenter for more than 30 minutes, if you plan to leave cleaning solution in the fermenter overnight then use StellarOxy instead. It is fine to leave StellarSan in the fermenter for more than 24 hours.
7. Do not over tighten stainless steel handles onto the neck of the FermZilla.
8. Avoid lifting the FermZilla while full.

### What's in the box



- 1 x 30L FermZilla Flat Bottom Fermenter with 24mm Hole Drilled for Tap
- 1 x 3 Piece Airlock ([KL01595](#))
- 1 x Easy Brew Bottling Wand 30cm with vinyl tube ([KL12607](#))
- 1 x Strip Stick on Thermometer ([KL01618](#))
- 4 x 50g - StellarClean PBW sachet ([KL09430](#))
- 1 x Beverage Tag – Label Sticker ([KL07153](#))
- 1 x Home Brew Hydrometer – Specific Gravity ([KL04312](#))
- 20 x 500mL Amber PET bottles with Tamper Seal caps
- Bottling / Sample Spring Loaded Tap

## Step-by-step instructions

### 1. Assembling the fermenter and other equipment

Once you have unboxed your KegLand 30L Flat-Bottom starter kit and checked everything is included, begin by assembling your fermenter.

1. Stick the Graduation Sticker to the tank. Follow the markings on the sticker to align this correctly. It is marked where you align the sticker to the bottom seam on the tank.



2. Stick the Stick-On Thermometer onto the outside of the fermenter. We suggest putting it next to the volume markings between the 10L and 20L markings.

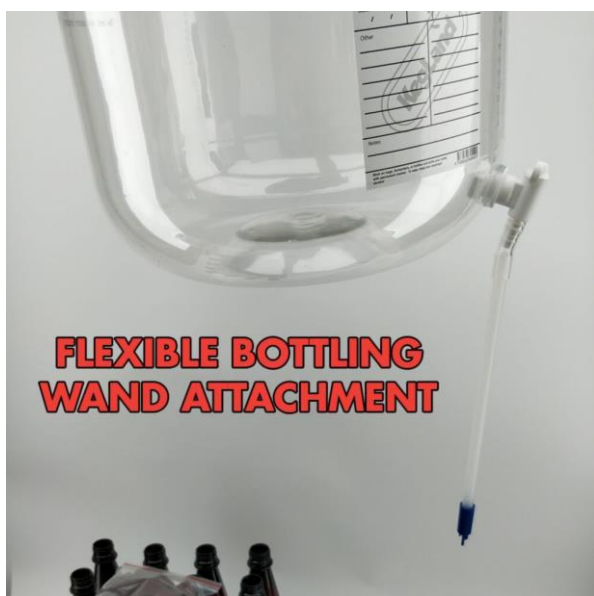
### FermZilla – Tap Assembly

1. Remove the white plastic nut and one silicon washer from tap.
2. From the outside of the tank, carefully thread the tap assembly through the hole.
3. Place the lid onto the neck of the tank and screw down the threaded lid ring.
4. Inside the tank, install the silicon washer and thread the nut to ensure there is a firm but not over tight seal.
5. Check that both washers are in place. There should be one washer inside and one washer outside the tank.

## Bottling Wand Assembly

1. Assemble the bottling wand by inserting the spring and pin valve with the stopper as shown below.
2. Insert the plastic tube of the bottling wand into the vinyl tube supplied. When it is time to bottle your first brew, the other end of this tubing will fit snugly on the barbed end of the tap.

HINT: If it is difficult to insert the bottling wand tube into the vinyl tube try placing the end of the vinyl tube in warm water to soften the plastic.





## 2. Cleaning and Sanitising the Fermenter and Equipment

1. Fill the rinsed-out fermenter with room temperature tap water up to the brim and empty in the included sachet of [Powerful Brewery Wash \(PBW\)](#) and mix well. The heavier the soiling, the longer it will need to soak. PBW is a proprietary blend of safe chemicals that do the hard work for you. Larger replacement tubs can be purchased [here](#). Any other dirty brewing equipment can also be soaked in the fermenter.
2. Soak the vinyl tube and bottling wand in the cleaning solution in the fermenter or in another large tub that contains PBW cleaning solution. Also run some PBW solution through the tap to ensure this is cleaned.
3. After 30 minutes of soaking, remove the vinyl tube and bottling wand from the solution and empty the cleaning liquid. It is good practice to empty some PBW through the tap to ensure this is cleaned as well. Any remaining soiling can be gently wiped away with a soft cloth. Make sure not to use harsh scrubbers or any abrasives that may scratch the plastic and create ideal places for batch-ruining bacteria to hide.
4. Once the fermenter is clean, rinse the PBW out with cold water.

NOTE: PBW acts as a cleaner however any equipment cleaned using PBW must be rinsed with water and PBW must not be left in the FermZilla for more than 30 minutes. If you are looking to soak with a cleaner for longer than 30 minutes we would suggest using StellarOxy instead. For an easier sanitisation option, a no-rinse sanitiser such as [stellarsan](#) can be used following cleaning with PBW. We would recommend following the cleaning steps with a no-rinse sanitiser as best practice.

## 3. Disassembly and Cleaning the Tap

It is a good idea to remove the tap for cleaning occasionally. Some brewers like to do this after every batch. This is a simple process. Remove the nut from inside the tank, and then unscrew the tap. The washers can be removed from the thread, and the whole assembly can be soaked in PBW. Remember to rinse after soaking in PBW, and to run some sanitiser through the tap before filling the tank with your next brew.



#### 4. Mixing the Wort (If your kit includes a Muntons ingredient kit):

Now the fun begins!

1. First, remove the yeast and instructions under the lid of your Muntons Ingredient can and soak the can in hot water to soften its syrup contents to make it easier to put in the fermenter. Spray the lid of the can with sanitiser and carefully open with your sanitised can opener. Pour the contents of your Muntons can into your empty, sanitised fermenter and scrape out the leftover syrup with your sanitised spoon. **Ensure the contents of the can are cooler than 50°C prior to pouring it into the fermenter.**
2. Top up the fermenter with 10 L of cold tap water and stir vigorously with your sanitised spoon to dissolve the syrup. Don't worry too much about splashing and foam here, the extra aeration and oxygen is actually good for the yeast!
3. Use your sanitised scissors to open your included 1 kg bag of Muntons Brew Enhancer and carefully pour into the fermenter. Stir well again with your sanitised spoon to dissolve. Don't worry if you can't dissolve all of the clumps, the yeast will still eat them all up anyway.
4. Top up your fermenter with cold tap water until you reach the volume specified on your can's instructions. Most Muntons Ingredient Kit Can's will make between 21-23 Litres. Give the fermenter one last stir with your sanitised spoon.
5. At this point, you should check your wort's temperature with your fermenter's Stick-On Thermometer. You should ideally be in the 17°C-20°C range.
6. Once you are at the perfect temperature, take your sanitised scissors and carefully cut off the corner of the small silver sachet of yeast. Sprinkle the yeast evenly over the surface of the wort.
7. Place your sanitised lid on and take a 'hydrometer sample' to check how much sugar is dissolved into the unfermented beer. This pre-fermentation reading will help you calculate how much alcohol will be in your final product. Simply take your hydrometer's storage tube and fill that with wort (don't worry! It's only 100 mL!),



float your hydrometer in the tube and take your reading from the 'meniscus line' (see picture right). This pre-fermentation gravity reading is known as your Original Gravity ('OG')

8. Half-fill the sanitised air-lock with liquid, this will keep the nasty outside air out but allow the natural CO<sub>2</sub> from fermentation out.

## 5. Fermentation:

1. You need to find somewhere in your house to put the fermenter where it will remain undisturbed for the next 3 weeks. This spot should ideally be out of direct sunlight and consistently between 17°C-20°C at all hours of the day. Temperature controllers attached to fridges and/or heater belts are perfect for this.
2. If the temperature gets over 20°C, it won't ruin your beer, but the chances of having off-flavours in your beer from the beer fermenting too fast increase significantly.

## 6. Bottling the Finished Brew:

1. After 3 weeks, gently move your fermenter to a bench where you plan to bottle the beer from. Make sure when you're moving the fermenter that you do your best not to stir up the settled yeast that's settled at the bottom of the fermenter.
2. Put your mixed sanitiser in a handy tub or bucket. At this point, you want to sanitise again everything that will be coming into contact with your beer, just as you did before (see, I told this whole 'sanitation' thing was serious business!).
3. Place your bottling wand and length of vinyl tubing in the bucket of sanitiser.
4. Take your clean bottles and caps and sanitise them all making sure to get every surface wet with sanitiser. You can then put them to drain upside down in a clean dishwashing rack (some people use their dishwasher drawers for this).
5. Priming: The beer needs more sugar added to the bottles so that the yeast leftover in the beer eat it and produce more CO<sub>2</sub> gas to carbonate and fizz the bottled beer. This can be done a few different ways: a. Carbonation drops [EASIEST]: these are pre-dose sugar pills you can purchase from your local Woolworths or homebrew





shop. You simply add 2 to each 740 mL bottle and fill it with beer and seal. b. Bottle priming: simply put one full teaspoon of sugar into each bottle before filling. c. Batch priming: where you mix in the pre-measured amount of sugar into the entire bulk batch before bottling and then bottle as normal.

6. Try not to aerate the beer during bottling. Oxygen is fermented beers worst enemy and stales it quickly.
7. Attach the bottling wand to the included tap using the small length of vinyl tubing. You may need to use hot or boiling water to dip the tubing in to soften it enough to ensure a tight fit.
8. The bottling wand is spring loaded, so it will only allow beer to flow when pushed against the bottom of the bottle. This also means that it fills from the bottom, which is ideal as a method to minimise oxygen uptake during bottling.
9. A great method to minimise mess and spillage during bottling is to place the Flat Bottom FermZilla on the kitchen counter over the dishwasher. Keep the dishwasher door open to act as a drip tray during bottling.
10. Once you have primed and bottled your beer, quickly put the sanitised cap on tightly and rinse off. Again, it is best practice to cap as you go to minimise O2 uptake.
11. Put the bottles in somewhere warm for the next 3 weeks so the yeast has time to eat the extra sugar added at bottling and create your beers fizz. Do not put the beer in the fridge until it is fully carbonated and fizzy.

## **7. TRYING YOUR BEER!**

Great! You've waited patiently these last 6 weeks, it's time to be rewarded with a tasting of your first batch of homemade beer! Take a bottle of your beer and place it in the fridge 24hrs before you intend to try it. This will allow the carbonation's fizz to settle down, so it doesn't foam too much. Careful not to stir up the yeast that's settled at the bottom too much.

## Troubleshooting

### Common Problems:

**Air Lock not bubbling?** Probably just the lid isn't sealed or delayed/completed fermentation. Air locks are only an indicator, so best bet would be to take a hydrometer sample (read how below).

**Mould on top of beer?** Bad sanitation or opening the fermenter too much. Toss this batch and start again as it may no longer safe to drink.

**Beer isn't fizzy?** Did you remember to put sugar in? If yes, then just wait longer or keep the beer warmer. Foams everywhere when opening? Possibly too much priming sugar, bottled too soon or bacterial infection.

**Too fizzy?** Possibly too much priming sugar. If it tastes sour too, it could be bacteria from bad sanitation. Germs go into your beer somewhere along the line so re-check your sanitation.

**Looks cloudy/hazy?** Completely normal. With time the yeast and haze will settle out. Will be stirred if moved.

### Common off-flavours:

**Tastes sour/off/vinegary?** Most likely bad sanitation. Bacteria or wild yeast have gotten in.

**Tastes too 'thin'?** Use less water and simple sugars and add more malt next time to get a heavier, richer body.

**Tastes 'cidery'?** Could be bad sanitation. Could also be too much simple sugars or fermenting too warm (20°C+).

**Tastes 'buttery'?** probably diacetyl caused by bottling too soon or not fermenting warm enough (below 17°C). This can be avoided by raising the fermenters temperature to 21°C towards the end of fermentation.

**Tastes 'yeasty'?** beer could just be too young and need aging. Sometimes caused by yeast being overheated.

**Tastes 'fruity' (not the good kind)?** Some exotic styles will. Often caused by fermenting too warm (20°C+).

**Tastes medicinal/astringent?** Could be from a bacterial infection or airborne yeast. It could also be from leaving too much sanitiser behind in the fermenter by not draining fully or if



you have a lot of chlorine in your tap water. Carbon filtering or campden tablets will help with the chlorine.

**Tastes 'boozy'/'burning'/'hot'/solventy?** Fusel alcohols caused by too high of a fermentation temperature (20°C+)

**Tastes like cardboard?** Oxidation. Often caused by aerating the beer too much post-fermentation. **Too bitter?** The specific Muntions can may have been too bitter for your tastes. Try a lighter style like a lager.

**Tastes/smells sulphury?** The yeast was stressed. Did your fermenter get below 17°C during the ferment? It could also be bacteria infection in some cases too.

Does your beer taste stale or skunked? The technical term for this is 'light-struck' and is caused by your beer being left in direct sunlight. If you can see your beer, so can UV rays, so use the darkest brown bottles you can.

Please visit this link for more in depth information on commonly encountered off-flavours and how to solve them.



## Taking Hydrometer readings

Hydrometers are used heavily in-home brewing to tell how much sugar is in your unfermented beer, how much alcohol is in your finished beer and whether your beer is done fermenting.

You simply fill your hydrometers tube with wort/beer and float your hydrometer in the solution. The gravity reading is the number displayed at the liquid level on the float (see picture right).

**To check if your beer has stopped fermenting**, simply take two separate readings three days apart from each other. If the second reading is lower, the beer is still fermenting. If it is the same as the first reading, Fermentation has finished.

**If your finishing gravity is much higher than you are expecting** (eg. Above 1.020 for a normal beer), your fermentation may have stalled. If this is the case, give the fermenter a gentle swirl to 'rouse' the yeast back into action and make sure the temperature isn't too high. If this doesn't work, you can sprinkle in some more yeast.

If you want to know what alcohol by volume ('ABV') your beer is, you can use this easy-to-use online calculator.

Click [here](#) for the in's and out's of using a hydrometer.<sup>1</sup> [This](#) resource is also excellent.<sup>2</sup>

## Premium ingredient packs

The reality with ingredients is you get what you pay for. If you're looking for a premium beer without the additional steps, then look no further than our [premium range of Muntons products](#). These packs are tailored to their style: the oaked ale includes quality malt with real oak chips, the American pale ale includes an additional packet of dry hops and a premium American ale yeast, the Belgian saison ale includes an authentic saison yeast as well as extra pack of malt to recreate that authentic secondary fermentation.



### Suggested Additional Equipment

Looking to improve your kit and have the right gear on hand to do the job in the best possible way?

- Ethanol spray ([KL05371](#))
- Stellarsan ([KL05357](#))
- Powerful Brewery Wash ('PBW') 1kg ([KL05494](#))
- Heavy Duty Brewing Gloves ([KL05289](#))
- Digital Temperature Controller ([KL01946](#))
- Heating Wrap ([KL01960](#)) **or** Heating Belt ([KL01953](#))

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<sup>1</sup> Jeff Flowers, How to Use a Hydrometer in 4 Easy Steps (learn.kegerator.com, 15 July 2014)  
<<https://learn.kegerator.com/using-a-hydrometer/>>

<sup>2</sup> John Palmer, Using Hydrometers (howtobrew.com, 2015).  
<<http://howtobrew.com/book/appendices/appendix-a/using-hydrometers>>