

Peace Pipe Pale Ale

Guide utilizing the Brewolution brew kettle	
This kit contains the ingredients to brew 23-25 litres of beer in a Brewolution Brewster brew kettle. It is suitable for any brewing system able to achieve a mash efficiency of around 80%.	
Content: Pouch 2: Yeast Pouch 3: Vienna, Cara Gold, Cara Blond, approx. 5780 g Pouch 4: Bittering hops, Nugget Pouch 5: Flavouring hops, Perle and finings Pouch 6: Aroma hops, Cascade Pouch 7: Dry hops, Cascade	
Mashing	
0 minutes	Add 19 litres of water to the Brewster kettle and set the temperature to 65°C
60 minutes	Submerge the kettle sieve into the kettle and add the malt (pouch 3). Start the mash pump and recirculate for 90 minutes. Top off with water during the process for water table. Stop the pump if the bottom of the kettle runs dry.
90 minutes	Heath 10-14 litres of sparge water to 78°C (for mash-out and sparging) After 90 minutes, at the sound of the alarm, set the temperature to 77°C. The mashing is complete when the alarm sounds again for 77°C. Raise the kettle sieve on the sieve hangers and sparge with the 78°C sparge water prepared earlier. Bring the wort level to 29 litres. Hang the kettle sieve to drain over a plastic fermenter.
Boiling and chilling	
0 minutes	Set the temperature on the Brewster kettle to 100°C, and set the time to 60 minutes.
45 minutes	When the temperature get to 100°C, and the alarm sounds, add the bittering hops (pouch 4). Add flavouring hops and finings (pouch 5). Sanitize your chiller.
60 minutes	Add aroma hops (pouch 6). After another 5 minutes, the Brewster kettle turns off. Chill the wort to approximately 20°C, and rack to a clean and sanitised fermenter.
Fermentation	
0 days	Pitch the yeast and ferment at 18°C – 22°C
7 days	After 7 days, rack the beer to a secondary clean and sanitised fermenter. Add the dry hops (Pouch 7)
14 days	After a further 7 days, bottle the beer. To bottle carbonate, rack the beer to a plastic fermenter containing tepid sugar water. (5-7 g caster sugar per litre beer dissolved in 200 ml water. Boil for 10 minutes and cool to 26°C). Bottle the beer and place at room temperature for a couple of weeks.
28 days	The beer is carbonated and ready to drink. Store at cellar temperature (13°C – 17°C) For the best result, let the beer mature for 3-6 weeks before consumption.
Notes	
It is advantageous to take notes during a brew: Typical stats:: Bitterness: 32 IBU Colour: 14 EBC Alcohol (ABV): 5,5 % OG: 1055 Your OG: _____ FG: 1014 Your FG: _____ Your alcohol % (OG-FG) / 7,5 = _____ %	
For general guidance using the Brewster kettle, please refer to www.brewolution.com/brewsterscan , or scan this QR-code. 	