

Jackie brown

- Gravity **14.7 BLG**
- ABV ---
- IBU **86**
- SRM **13.4**
- Style **Brown IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.4 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (94.3%)	80 %	7
Grain	Crystal malt	0.11 kg (1.7%)	70 %	340
Grain	Brown malt	0.2 kg (3.1%)	--- %	140
Grain	Roast barley	0.05 kg (0.8%)	--- %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	60 min	15.3 %
Aroma (end of boil)	Bullion	25 g	15 min	7.2 %
Aroma (end of boil)	Bullion	25 g	0 min	7.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
London esb	Ale	Dry	11.5 g	Danstar