

## #?? American IPA (Brewdog Jack Hammer)

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **110**
- SRM **4.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	FAWCETT - Lager	6 kg (100%)	80.5 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	25 g	60 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Centennial	18.75 g	30 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	18.75 g	30 min	15.5 %
Boil	Centennial	50 g	0 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	25 g	0 min	15.5 %
Dry Hop	Amarillo	100 g	5 day(s)	9.5 %
Dry Hop	Citra	100 g	5 day(s)	12 %
Dry Hop	Simcoe	100 g	5 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale II	Ale	Liquid	125 ml	Wyeast Labs