

## the Butcher v2

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **78**
- SRM **11**
- Style **Red 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 **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **65.5 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.1C**
- Add grains
- Keep mash **60 min** at **65.5C**
- Keep mash **5 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (98%)	80 %	5
Grain	Carafa III	0.1 kg (2%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Citra	15 g	30 min	12 %
Boil	Simcoe	15 g	30 min	13.2 %
Aroma (end of boil)	Amarillo	15 g	15 min	9.5 %
Aroma (end of boil)	Simcoe	15 g	15 min	13.2 %
Aroma (end of boil)	Citra	15 g	15 min	12 %
Dry Hop	Citra	50 g	7 day(s)	12 %
Dry Hop	Simcoe	15 g	7 day(s)	13.2 %
Dry Hop	Amarillo	23 g	7 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	---