

red ipa a'la

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **81**
- SRM **14**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	red activ viking malt	5 kg (96.2%)	79 %	30
Grain	crystal 160	0.2 kg (3.8%)	73 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	18 g	60 min	15.5 %
Boil	Citra	15 g	30 min	12 %
Boil	Simcoe	15 g	30 min	13.2 %
Boil	Amarillo	15 g	15 min	9.5 %
Boil	Simcoe	15 g	15 min	13.2 %
Dry Hop	Citra	50 g	7 day(s)	12 %
Dry Hop	Simcoe	50 g	7 day(s)	13.2 %
Dry Hop	Amarillo	30 g	7 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM 52	Ale	Slant	300 ml	Fermentum

Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc	5 g	Boil	15 min