

## Qc-09

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **76**
- SRM **4.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Chinook	25 g	15 min	13 %
Boil	Cascade	50 g	15 min	6 %
Boil	Cascade	20 g	5 min	6 %
Dry Hop	Cascade	30 g	4 day(s)	6 %

### Yeasts

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