

Western

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **66**
- SRM **5.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **71 C**, Time **30 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **71C**
- Keep mash **15 min** at **76C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (83.3%)	80 %	5
Grain	Viking Munich Malt	0.5 kg (16.7%)	78 %	18

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	30 min	13.5 %
Boil	Equinox	10 g	20 min	13.1 %
Aroma (end of boil)	Chinook	10 g	10 min	13 %
Dry Hop	Chinook	5 g	5 day(s)	13 %
Dry Hop	Mosaic	10 g	5 day(s)	12.6 %
Dry Hop	Citra	10 g	5 day(s)	13.3 %

Yeasts

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