

WWW

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **47**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- 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 **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.7 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	3.5 kg (60.3%)	80 %	5
Grain	Rice, Flaked	1 kg (17.2%)	70 %	2
Grain	Bestmalz Red X	0.5 kg (8.6%)	79 %	30
Grain	Barley, Flaked	0.8 kg (13.8%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Pacific Gem	10 g	60 min	15.3 %
Boil	Enigma (AUS)	10 g	50 min	17.2 %
Boil	Enigma (AUS)	10 g	10 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	30 g	0 min	17.2 %
Whirlpool	Pacific Gem	10 g	30 min	15.3 %
Dry Hop	orbit	50 g	3 day(s)	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Other	mango	1500 g	Secondary	7 day(s)