

WC

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **85**
- SRM **7.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **14.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **14.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (83.3%)	80 %	5
Grain	Viking melanoidynowy	0.25 kg (8.3%)	75 %	60
Grain	Carared	0.25 kg (8.3%)	75 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Equinox	10 g	50 min	13.1 %
Boil	Marynka	10 g	40 min	10 %
Boil	Equinox	10 g	30 min	13.1 %
Boil	Marynka	10 g	10 min	10 %
Aroma (end of boil)	Equinox	10 g	0 min	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	---