

aCha

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **61**
- SRM **8.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **60 min** at **100C**
- Sparge using **12.3 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	5 kg (76.9%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (7.7%)	78 %	4
Grain	Weyermann - Carared	0.7 kg (10.8%)	75 %	45
Grain	Viking melanoidynowy	0.3 kg (4.6%)	75 %	60

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Cascade	20 g	60 min	6 %
Boil	Amarillo	25 g	5 min	9.5 %
Boil	Citra	30 g	5 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	10 g	---