

IPkA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **70**
- SRM **3.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **15 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **24.5 liter(s)** of **76C** water or to achieve **38.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Lager	2 kg (29%)	81 %	3
Grain	Viking Pale Ale malt	2 kg (29%)	80 %	5
Grain	Viking Pilsner malt	2 kg (29%)	82 %	4
Grain	Płatki owsiane	0.4 kg (5.8%)	85 %	3
Grain	3 Płatki pszeniczne	0.5 kg (7.2%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	halertau ariana	30 g	60 min	11.7 %
Boil	epic	30 g	60 min	3.7 %
Boil	Simcoe	30 g	30 min	12.9 %
Boil	Citra	30 g	5 min	12.3 %
Boil	Cascade	30 g	15 min	6.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	trawa cytrynowa	50 g	Boil	55 min