

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **7.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (73.5%)	80 %	5
Grain	Płatki pszeniczne	0.5 kg (7.4%)	60 %	3
Grain	Płatki owsiane	0.5 kg (7.4%)	60 %	3
Grain	Weyermann pszeniczny jasny	0.5 kg (7.4%)	80 %	6
Grain	Weyermann - Carawheat	0.3 kg (4.4%)	77 %	110

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	70 min	9.6 %
Whirlpool	Izabella	30 g	10 min	5.2 %
Dry Hop	Izabella	60 g	5 day(s)	5.2 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	odwar ze świerku	500 g	Boil	10 min
Spice	owoc jałowca	8 g	Boil	10 min