

APA I

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **7 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (80%)	80 %	6
Adjunct	Płatki owsiane	0.5 kg (20%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Cardinal	20 g	60 min	8.5 %
Aroma (end of boil)	Centennial	10 g	1 min	10.5 %
Dry Hop	Styrian Cardinal	10 g	1 day(s)	8.5 %
Dry Hop	Centennial	20 g	1 day(s)	10.5 %

Yeasts

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