

APA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **41**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **23 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **15.3 liter(s)**

Steps

- Temp **69 C**, Time **80 min**
- Temp **79 C**, Time **5 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **80 min** at **69C**
- Keep mash **5 min** at **79C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (81.9%)	80 %	5
Grain	Biscuit Malt	0.078 kg (2.6%)	79 %	45
Grain	Płatki pszeniczne	0.155 kg (5.1%)	85 %	3
Grain	Pszeniczny	0.32 kg (10.5%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	45 min	11.1 %
Whirlpool	Cascade	30 g	20 min	6.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	80 ml	Fermentis