

3# APA

- Gravity **15.2 BLG**
- ABV ---
- IBU **34**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.4 kg (80.6%)	80 %	5
Grain	Platki owsiane	0.4 kg (6%)	85 %	3
Grain	Viking Pilsner malt	0.5 kg (7.5%)	82 %	4
Grain	Viking Wheat Malt	0.4 kg (6%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	45 min	8.4 %
Aroma (end of boil)	Summit	15 g	5 min	17 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	15 g	2 min	15.5 %
Dry Hop	Citra	25 g	5 day(s)	12 %
Dry Hop	Columbus/Tomahawk/Zeus	15 g	5 day(s)	15.5 %
Dry Hop	Summit	15 g	5 day(s)	17 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	150 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	4 g	Boil	10 min