

APA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **8 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (78.3%)	80 %	5
Grain	Cara-Pils/Dextrine	0.23 kg (6%)	72 %	4
Grain	Weyermann pszeniczny jasny	0.5 kg (13.1%)	80 %	6
Grain	Fawcett - Crystal	0.1 kg (2.6%)	70 %	160

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	7 g	30 min	11.3 %
Boil	Citra	7 g	20 min	13.5 %
Boil	Chinook	10 g	15 min	11.3 %
Boil	Cascade	10 g	10 min	7.1 %
Aroma (end of boil)	Cascade	8 g	5 min	7.1 %
Aroma (end of boil)	Mosaic	5 g	5 min	12 %
Aroma (end of boil)	Chinook	3 g	5 min	11.3 %
Dry Hop	Mosaic	15 g	3 day(s)	12 %
Dry Hop	Columbus/Tomahawk/Zeus	15 g	3 day(s)	12.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	1.5 g	Mash	70 min
Fining	Mech irlandzki	3 g	Boil	10 min