APA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **32**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **68 C**, Time **80 min**

Mash step by step

- Heat up **21.2 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **80 min** at **68C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Oale Ale - Thomas Fawcett	3.5 kg *(57.9%)*	81 %	6
Grain	Weyermann - Pilsner Malt Eraclea	1.5 kg *(24.8%)*	81 %	4
Grain	Pszeniczny	0.3 kg *(5%)*	85 %	4
Grain	Weyermann - Carapils	0.3 kg *(5%)*	78 %	4
Grain	Viking Pale Ale malt	0.45 kg *(7.4%)*	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	13.2 %
Boil	Cascade	20 g	60 min	6 %
Aroma (end of boil)	Cascade	20 g	10 min	6 %
Whirlpool	Cascade	20 g	5 min	6 %
Whirlpool	Mosaic	30 g	1 min	10 %
Whirlpool	Citra	30 g	1 min	12 %
Dry Hop	Citra	50 g	3 day(s)	12 %
Dry Hop	Mosaic	50 g	5 day(s)	10 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Yeasts

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