

APA MIX

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1.5 kg (30.3%)	85 %	7
Grain	Strzegom Monachijski typ I	1 kg (20.2%)	79 %	14
Grain	Żytni	1 kg (20.2%)	85 %	6
Grain	Strzegom Wiedeński	1 kg (20.2%)	79 %	10
Grain	Jęczmień niesłodowany	0.2 kg (4%)	75 %	2
Grain	Słód owsiany Fawcett	0.25 kg (5.1%)	61 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	30 min	15.5 %
Aroma (end of boil)	Falconers flight	15 g	10 min	10.3 %
Aroma (end of boil)	Mosaic	15 g	10 min	12.2 %
Aroma (end of boil)	Falconers flight	10 g	2 min	10.3 %
Aroma (end of boil)	Mosaic	10 g	2 min	12.2 %
Whirlpool	Falconers flight	10 g	15 min	10.3 %
Whirlpool	Mosaic	10 g	15 min	12.2 %
Dry Hop	Falconers flight	15 g	5 day(s)	10.3 %

Dry Hop	Mosaic	15 g	5 day(s)	12.2 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Slant	150 ml	Safale