

APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **85**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **20.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1 kg (27.8%)	85 %	7
Grain	Weyermann - Bohemian Pilsner Malt	1 kg (27.8%)	81 %	4
Grain	Weyermann - Pale Wheat Malt	1 kg (27.8%)	85 %	5
Grain	Strzegom Bursztynowy	0.2 kg (5.6%)	70 %	49
Grain	Płatki owsiane	0.4 kg (11.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	sabro	25 g	60 min	15 %
Boil	sabro	15 g	30 min	15 %
Aroma (end of boil)	sabro	10 g	10 min	15 %
Dry Hop	Amarillo	50 g	5 day(s)	9.5 %
Dry Hop	Mosaic	50 g	5 day(s)	10 %

Yeasts

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