

APA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **27**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **21 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **21 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (83.3%)	80 %	7
Grain	Strzegom Monachijski typ I	0.3 kg (7.1%)	79 %	16
Grain	Płatki owsiane	0.4 kg (9.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	23 g	60 min	9.7 %
Aroma (end of boil)	Centennial	7 g	0 min	9.7 %
Aroma (end of boil)	Equinox	30 g	0 min	13.1 %
Aroma (end of boil)	Citra	30 g	0 min	12 %
Dry Hop	Centennial	30 g	4 day(s)	9.7 %
Dry Hop	Citra	30 g	4 day(s)	12 %

Yeasts

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