

APA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **19**
- SRM **5**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (63.5%)	79 %	6
Grain	Pszeniczny	1 kg (15.9%)	85 %	4
Grain	Viking Pale Ale malt	0.5 kg (7.9%)	80 %	9
Grain	Płatki pszeniczne	0.4 kg (6.3%)	85 %	3
Grain	Płatki pszeniczne	0.4 kg (6.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	20 min	9.5 %
Boil	Centennial	10 g	20 min	10.5 %
Boil	Cascade	10 g	10 min	6 %
Cascade AUS				
Whirlpool	Amarillo	10 g	0 min	13.1 %
Whirlpool	Centennial	10 g	0 min	10.5 %
Whirlpool	Cascade	20 g	0 min	6 %
Cascade AUS				
Dry Hop	Amarillo	40 g	7 day(s)	9.5 %
Dry Hop	Centennial	20 g	7 day(s)	10.5 %

Dry Hop	Cascade	20 g	7 day(s)	6 %
Cascade AUS				
Dry Hop	Amarillo	30 g	3 day(s)	9.5 %
Dry Hop	Centennial	20 g	3 day(s)	10.5 %
Dry Hop	Cascade	25 g	7 day(s)	6 %
Cascade USA				
Dry Hop	Cascade	15 g	3 day(s)	6 %
Cascade USA				

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis