

APA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **39**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **8 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **30.3 liter(s)**

Steps

- Temp **63 C**, Time **25 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **24.2 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **25 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.25 kg (86.8%)	79 %	6
Grain	Pilzneński	0.8 kg (13.2%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.8 %
Boil	Cascade PL	10 g	60 min	7.3 %
Boil	Cascade PL	15 g	15 min	7.3 %
Boil	Cascade PL	15 g	5 min	7.3 %
Dry Hop	Cascade PL	50 g	4 day(s)	7.3 %

Yeasts

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