

APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **40**
- SRM **8.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3.75 kg (78.9%)	79 %	16
Grain	Strzegom Monachijski typ II	0.5 kg (10.5%)	79 %	22
Grain	Viking Malt Karmelowy Czerwony	0.5 kg (10.5%)	75 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle PL 2020	13 g	60 min	7.2 %
Boil	Saaz CZK 2019	25 g	60 min	3.5 %
Boil	Oktawia PL 2019	25 g	60 min	7.1 %

Yeasts

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