

APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **67**
- SRM **6.5**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **68 C**, Time **40 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **68C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (50%)	79 %	6
Grain	Monachijski	3 kg (50%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma	30 g	60 min	17.2 %
Boil	Cascade	50 g	20 min	6.9 %
Dry Hop	Citra	100 g	4 day(s)	12 %
Dry Hop	Cascade	90 g	4 day(s)	6 %

Yeasts

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