

APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **49**
- SRM **4.7**
- 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 **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Strzegom	3 kg (66.7%)	79 %	6
Grain	Strzegom Monachijski	1 kg (22.2%)	79 %	12
Grain	Caramel Pale Cara	0.5 kg (11.1%)	78 %	9

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	22 g	60 min	11.5 %
Boil	Eureka!	20 g	25 min	14.8 %
Dry Hop	Eureka!	25 g	7 day(s)	16 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Ale Y514	Ale	Slant	500 ml	---