

APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **10.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.6 kg (80%)	81 %	4
Grain	Monachijski	0.2 kg (10%)	80 %	16
Grain	Pszeniczny	0.2 kg (10%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	16 %
Boil	Cascade	5 g	20 min	6 %
Boil	Falconner's Flight	10 g	5 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	5 g	---