APA1

- Gravity 19.4 BLG
- ABV ---
- IBU **33**
- SRM **17**
- Style American Pale Ale

Batch size

- Expected quantity of finished beer 6 liter(s)
- Trub loss 10 %
- Size with trub loss 6.6 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 7.3 liter(s)

Mash information

- Mash efficiency 80 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size **6.4 liter(s)**
- Total mash volume 8.6 liter(s)

Steps

- Temp 67 C, Time 60 min
 Temp 72 C, Time 15 min
- Temp 77 C, Time 1 min

Mash step by step

- Heat up 6.4 liter(s) of strike water to 74.9C
- Add grains
- Keep mash 60 min at 67C
- Keep mash 15 min at 72C
- Keep mash 1 min at 77C
- Sparge using 3 liter(s) of 76C water or to achieve 7.3 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Pale Ale	1.7 kg <i>(79.4%)</i>	80 %	4
Grain	Carafa	0.04 kg <i>(1.9%)</i>	70 %	800
Grain	Monachijski	0.4 kg (18.7%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Golding	10 g	25 min	5 %
Boil	Challenger	10 g	50 min	7 %
Boil	Golding	10 g	5 min	5 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5 g	Fermentis