

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

| Type | Name | Amount | Yield | EBC |
|-------|-------------|----------------|-------|-----|
| Grain | Pale Ale | 1.7 kg (79.4%) | 80 % | 4 |
| Grain | Carafa | 0.04 kg (1.9%) | 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 | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 5 g | Fermentis |