

## #200 APA KRA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **44**
- SRM **4.7**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **15 %**
- Size with trub loss **19.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.7 kg (93.1%)	79 %	6
Grain	Weyermann - Carapils	0.2 kg (4%)	78 %	4
Grain	płatki jęczmienne	0.15 kg (3%)	60 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	8 g	60 min	16.5 %
Boil	Elani	50 g	10 min	5.7 %
Boil	Columbus/Tomahawk/Zeus	42 g	5 min	16.5 %
Dry Hop	Elani	50 g	5 day(s)	5.7 %
Dry Hop	Mosaic	50 g	5 day(s)	10 %
Dry Hop	Sabro	50 g	5 day(s)	15 %
Dry Hop	Sabro cryo	25 g	5 day(s)	20 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	200 ml	White Labs