

## APA #4

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **36**
- SRM **7.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (80.6%)	80 %	5
Grain	Strzegom Bursztynowy	1 kg (16.1%)	70 %	49
Grain	Carahell	0.2 kg (3.2%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	11.7 %
Boil	Taiheke	30 g	5 min	6.7 %
Whirlpool	Taiheke	60 g	0 min	6.7 %
Dry Hop	Taiheke	90 g	3 day(s)	6.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Slant	200 ml	Fermentis