

## APA 3.0

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **33**
- SRM **4.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **37.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **20.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **23.5 liter(s)** of **76C** water or to achieve **37.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	5 kg (72.5%)	80 %	6
Grain	Pszeniczny	1.15 kg (16.7%)	85 %	4
Grain	Strzegom Pilznieński	0.75 kg (10.9%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	30 min	13 %
Boil	Chinook	15 g	15 min	13 %
Aroma (end of boil)	Chinook	25 g	15 min	13 %
Chmiel dodać po wyłączeniu palnika.				
Whirlpool	Mosaic	30 g	15 min	10 %
Chmiel dodać przy temperaturze 90 stopni. Estymacja izomeryzacji wciąż na poziomie 5-15%.				
Whirlpool	Mosaic	70 g	0 min	10 %
Chmiel dodać przy temperaturze 80 stopni. Do końca chłodzenia. Około 20 minut.				
Dry Hop	Mosaic	150 g	3 day(s)	10 %
Dry Hop	Mosaic	150 g	3 day(s)	10 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM54 Gorączka kalifornijska	Ale	Liquid	30 ml	Fermentum Mobile
Safale US-05	Ale	Dry	10 g	Fermentis

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Fining	Mech Irlandzki	5 g	Boil	15 min