

## APA testowa #2

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **4.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **5.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3 liter(s)**
- Total mash volume **4 liter(s)**

### Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **5.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	0.8 kg (80%)	81 %	5
Grain	Płatki owsiane	0.2 kg (20%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	10 min	12 %
Boil	Mosaic	10 g	5 min	10 %
Aroma (end of boil)	Citra	5 g	1 min	12 %
Whirlpool	Simcoe	10 g	5 min	13.2 %
Dry Hop	Mosaic	10 g	3 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	30 ml	Fermentum Mobile

### Notes

- Woda Primavera  
+ 1ml kwasu mlekowego  
+ 1.5g chlorku wapnia

+ 1g s3l epsom  
*Feb 10, 2018, 5:39 PM*