

## APA #21

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **4.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **19.9 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5.2 kg (91.2%)	85 %	7
Grain	Platki owsiane	0.5 kg (8.8%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	50 g	20 min	12 %
Boil	Chinook	25 g	5 min	13 %
Dry Hop	citra	52 g	3 day(s)	12 %
Dry Hop	chinook	26 g	3 day(s)	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	104 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	2.08 g	Mash	1 min