

# APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **66**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **2 %**
- Size with trub loss **30.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **22.5 liter(s)** of **76C** water or to achieve **33.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale	5.3 kg (93.3%)	80 %	6
Grain	Platki owsiane	0.23 kg (4%)	85 %	3
Grain	owies	0.15 kg (2.6%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Columbus/Tomahawk/Zeus	15 g	150 min	15.1 %
Boil	Cascade	50 g	5 min	8.3 %
Boil	Citra	50 g	5 min	13.1 %
Whirlpool	citra	50 g	45 min	13.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us5-05	Ale	Slant	300 ml	safale

## Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	15 min

## Notes

- schłodzenie do 85 stopni, 50g Citry, zostawienie na 45 minut i dalsze schładzanie - taki eksperyment  
zerżnięty z byo <https://byo.com/article/awardwinning-ipa-recipes/>  
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