

## Kto to widzial?

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- Gravity **11.9 BLG**
- ABV ---
- IBU **47**
- SRM **5.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

### Steps

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

### Mash step by step

- Heat up **14.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	4.7 kg (100%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	15 g	60 min	8.8 %
Boil	Amarillo	15 g	45 min	8.8 %
Aroma (end of boil)	Amarillo	30 g	5 min	8.8 %
Aroma (end of boil)	Citra	30 g	5 min	12.5 %
Aroma (end of boil)	Cascade	30 g	5 min	6.8 %
Dry Hop	Amarillo	30 g	3 day(s)	8.8 %
Dry Hop	Cascade	30 g	3 day(s)	6.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis