

## PZ APA

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- Gravity **13.6 BLG**
- ABV ---
- IBU **40**
- SRM **5.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.6 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **74 C**, Time **10 min**

### Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **74C**
- Sparge using **23.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (75%)	81 %	4
Grain	Pszeniczny	1 kg (12.5%)	85 %	4
Grain	Strzegom Pale Ale	1 kg (12.5%)	81 %	12

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	40 g	60 min	11 %
Boil	Citra	15 g	10 min	12 %
Boil	Ahtanum	15 g	5 min	5 %
Boil	Amarillo	15 g	5 min	9.5 %
Whirlpool	Citra	20 g	0 min	12 %
Whirlpool	Ahtanum	20 g	0 min	5 %
Whirlpool	Amarillo	20 g	0 min	9.5 %
Dry Hop	Citra	20 g	5 day(s)	12 %
Dry Hop	Ahtanum	20 g	5 day(s)	5 %
Dry Hop	Amarillo	20 g	5 day(s)	9.5 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Ale	Dry	20 g	Fermentis