

## proste ale

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **38**
- SRM **3.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pilznieński Malteurop	4 kg (89.9%)	80 %	5
Sugar	cukier	0.25 kg (5.6%)	100 %	0
Grain	płatki jęczmienne	0.2 kg (4.5%)	65 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	20 g	60 min	9.5 %
Boil	Citra	25 g	7 min	13.3 %
Boil	sabro	20 g	7 min	15.5 %
Aroma (end of boil)	Citra	25 g	0 min	13.3 %
Aroma (end of boil)	sabro	20 g	0 min	15.5 %
Dry Hop	sabro	30 g	3 day(s)	15.5 %
Dry Hop	Citra	30 g	3 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP090 - San Diego Super Yeast	Ale	Liquid	1500 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1 g	Boil	10 min