

## PEPPER ALE 19

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- Gravity **14.3 BLG**
- ABV ---
- IBU **50**
- SRM **10.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (90.9%)	79 %	6
Grain	Caraaroma	0.1 kg (1.8%)	78 %	400
Grain	Płatki owsiane	0.4 kg (7.3%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	10 g	60 min	10.5 %
Boil	Centennial	30 g	30 min	10.5 %
Boil	Centennial	30 g	10 min	10.5 %
Whirlpool	Centennial	30 g	0 min	10.5 %
Dry Hop	Centennial	100 g	4 day(s)	10.5 %

### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
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Flavor	Zielony pieprz - ziarna	11 g	Secondary	3 day(s)
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