

## Warsztat 3.10.2020 Kielce - Czeskie Pale Ale

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **31**
- SRM **4.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (77.8%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (22.2%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	8 %
Boil	Sladek	20 g	15 min	5.8 %
Aroma (end of boil)	Sladek	30 g	2 min	5.8 %