

## warka 17 duza

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **17**
- SRM **3.8**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	hook head pilsner	4 kg (76.9%)	80.5 %	3.5
Grain	carmel malt Briess - Carapils Malt	0.15 kg (2.9%)	74 %	3
Grain	BESTMALZ - Best Minich	0.6 kg (11.5%)	80.5 %	15
Grain	irish wheat	0.25 kg (4.8%)	75 %	4
Grain	Oats, Flaked	0.2 kg (3.8%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (USA)	40 g	40 min	3.75 %
Boil	Magnum	10 g	10 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis