

## WARKA #7

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **49**
- SRM **5.8**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.7 liter(s)**
- Total mash volume **16.9 liter(s)**

### Steps

- Temp **67 C**, Time **75 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **12.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (94.8%)	80 %	7
Grain	Płatki owsiane	0.22 kg (5.2%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	12 g	60 min	10.5 %
Boil	Citra	12 g	30 min	12 %
Boil	Simcoe	12 g	15 min	13.2 %
Boil	Citra	8 g	5 min	12 %
Dry Hop	Citra	16 g	4 day(s)	12 %
Dry Hop	Centennial	16 g	4 day(s)	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	maliny	1000 g	Secondary	3 day(s)

## Notes

- owoce na cichą, na 14 dni  
*Oct 19, 2018, 12:20 PM*