

## warka 38

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **4.4**
- Style **Premium American Lager**

### 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 **16.9 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **16.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	1.56 kg (27.7%)	78 %	6
Grain	Oats, Flaked	0.25 kg (4.4%)	80 %	2
Grain	Weyermann - Bohemian Pilsner Malt	1.87 kg (33.2%)	81 %	4
Grain	Briess - Wheat Malt, White	0.25 kg (4.4%)	85 %	5
Grain	aromatic cara aroma	0.15 kg (2.7%)	78 %	50
Grain	Briess - Carapils Malt	0.246 kg (4.4%)	74 %	3
Grain	Słód CHÂTEAU PEATED	1.1 kg (19.6%)	80 %	4
Grain	peated glenesk	0.2 kg (3.6%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	30 min	11.5 %
Boil	Mosaic	10 g	5 min	11.5 %

### Yeasts

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

- po gotowaniu wyszło 1050-12.5 blg  
*Feb 8, 2019, 3:53 PM*