

# warka1

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- Gravity **11 BLG**
- ABV ---
- IBU **52**
- SRM **5.2**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **10.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.3 liter(s)**
- Total mash volume **7 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **73 C**, Time **20 min**

## Mash step by step

- Heat up **5.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **73C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **10.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	1.2 kg (68.2%)	80 %	7
Grain	Monachijski	0.4 kg (22.7%)	80 %	16
Grain	Bestmalz Carmel Pils	0.16 kg (9.1%)	75 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	16 g	10 min	4 %
Boil	Magnum	12 g	50 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	8.8 g	---