

## warka#5 Polski Pils

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **44**
- SRM **5.1**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **1 %**
- Size with trub loss **20.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **3 %/h**
- Boil size **21.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pilzneński Viking Malt	4 kg (88.9%)	--- %	4
Grain	Słód karmelowy 30 Viking Malt	0.5 kg (11.1%)	--- %	35

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chmiel Marynka PolishHops	50 g	50 min	7 %
Boil	Chmiel Lubelski PolishHops	50 g	5 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M54 Californian Lager	Lager	Dry	10 g	Mangrove Jack's