

## PILS sekundo

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **40**
- SRM **5.1**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.8 kg (93.3%)	81 %	4
Grain	Biscuit Malt	0.2 kg (6.7%)	79 %	45

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	5 g	15 min	10 %
Boil	Perle	5 g	15 min	7 %
Whirlpool	Marynka	10 g	30 min	10 %
Whirlpool	Perle	10 g	30 min	7 %
Dry Hop	Perle	5 g	20 day(s)	7 %
w 3 dzień od rozpoczęcia fermentacji				
Dry Hop	Perle	5 g	2 day(s)	7 %
na CC				

### Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Slant	200 ml	własne

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Witamina c	2 g	Bottling	---