

## Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **3.7**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (90.9%)	81 %	4
Grain	Weyermann - Carapils	0.5 kg (9.1%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Marynka	25 g	30 min	10 %
Whirlpool	Lublin (Lubelski)	20 g	0 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Liquid	200 ml	Omega

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	2.5 g	Boil	15 min