

## Pils Tradition - 12blg

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **4**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **28.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

### Steps

- Temp **50 C**, Time **0 min**
- Temp **54 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **0 min** at **50C**
- Keep mash **10 min** at **54C**
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.3 kg (81.1%)	81 %	4
Grain	Monachijski	0.5 kg (9.4%)	80 %	16
Grain	Briess - Carapils Malt	0.5 kg (9.4%)	74 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	30 g	60 min	5 %
Aroma (end of boil)	Hallertau Tradition	25 g	15 min	5 %
Whirlpool	Hallertau Tradition	20 g	30 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - W35 German Lager	Lager	Dry	10 g	Gozdawa