

## Pils DE 11.24

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **38**
- SRM **4**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

### Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **74 C**, Time **40 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **74C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4.5 kg (90%)	80 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (10%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	8 %
Boil	Saaz (Czech Republic)	10 g	20 min	3.3 %
Boil	Tettnang	15 g	20 min	2.5 %
Boil	Tradition	14 g	20 min	5.5 %
Aroma (end of boil)	Hersbrucker	15 g	0 min	3.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 2278 Czech Pils	Lager	Liquid	2000 ml	Wyeast Labs