

## Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **31**
- SRM **3.3**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **19.2 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **65 C**, Time **15 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **15 min** at **65C**
- Keep mash **40 min** at **72C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **19.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	3 kg (85.7%)	81 %	3.5
Grain	Weyermann - Carapils	0.5 kg (14.3%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	30 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	500 ml	Fermentum Mobile