

## Pils - 13 BLG

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **4.5**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg (90%)	81 %	5
Grain	Weyermann - Light Munich Malt	0.5 kg (10%)	82 %	14

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka - szyszki	30 g	60 min	8 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	23 g	Fermentis