

## pils

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **3.5**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (90%)	80 %	4
Grain	Weyermann - Carapils	0.5 kg (10%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	50 g	60 min	3.4 %
Boil	Saaz (Czech Republic)	25 g	20 min	3.4 %
Boil	Saaz (Czech Republic)	15 g	10 min	3.4 %
Boil	Saaz (Czech Republic)	10 g	1 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safele s123	Lager	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	10 min