

## Pils

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **37**
- SRM **5.6**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **14.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	0.35 kg (7.4%)	80 %	5
Grain	Strzegom Pilzneński	1.8 kg (38.1%)	80 %	4
Grain	Strzegom Monachijski typ I	0.58 kg (12.3%)	79 %	16
Grain	Strzegom Wiedeński	2 kg (42.3%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %
Boil	Lublin (Lubelski)	10 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	200 ml	Fermentum Mobile