

## pils 22/3

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **4.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **35 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **35 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (80.6%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (16.1%)	79 %	16
Adjunct	zakwaszający	0.2 kg (3.2%)	--- %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %
Boil	Saaz (Czech Republic)	10 g	20 min	4.5 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	1 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis