

## pils 2

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **33**
- SRM **5.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **23.2 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17.8 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (74.1%)	80 %	4
Grain	Bestmalz Carmel Pils	0.2 kg (3.7%)	75 %	5
Grain	Pszeniczny	0.2 kg (3.7%)	85 %	5
Grain	Strzegom Monachijski typ I	1 kg (18.5%)	79 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka (goryczkowy)	25 g	60 min	10 %
Boil	Lublin (Lubelski) aromat	25 g	30 min	4 %
Boil	Saaz (Czech) aromat	25 g	10 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Slant	100 ml	Mangrove Jack's