

## Pils

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **33**
- SRM **3.8**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **4.3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **24.4 liter(s)**

### Steps

- Temp **50 C**, Time **1 min**
- Temp **66 C**, Time **55 min**
- Temp **72 C**, Time **5 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **53.5C**
- Add grains
- Keep mash **1 min** at **50C**
- Keep mash **55 min** at **66C**
- Keep mash **5 min** at **72C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (91.3%)	78 %	3.5
Grain	Strzegom Monachijski typ I	0.4 kg (8.7%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Aroma (end of boil)	Lublin (Lubelski)	50 g	5 min	4 %
Aroma (end of boil)	Mittelfruh	30 g	5 min	4.3 %
Aroma (end of boil)	Lublin (Lubelski)	50 g	0 min	4 %
Aroma (end of boil)	Sybilla	25 g	0 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast 2308 Munich Lager	Lager	Slant	380 ml	Fermentum Mobile