

# pils

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **4.4**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (87.7%)	80 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (8.8%)	79 %	30
Adjunct	zakwaszający	0.2 kg (3.5%)	--- %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9 %
Boil	Sladek aromat	28 g	15 min	6.8 %
Boil	Magnat	10 g	10 min	11.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	30 ml	Fermentum Mobile