

# Czeski pils

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **37**
- SRM **3.3**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **32.3 liter(s)**
- Total mash volume **42.1 liter(s)**

## Steps

- Temp **45 C**, Time **0 min**
- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **32.3 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **36.9 liter(s)** of **76C** water or to achieve **59.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	9 kg (92%)	81 %	4
Grain	Cara-Pils/Dextrine	0.79 kg (8%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	56.25 g	60 min	11.7 %
Boil	Saaz (Czech Republic)	45 g	30 min	3 %
Aroma (end of boil)	Saaz (Czech Republic)	33.75 g	0 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	450 ml	Fermentis