

# pilzner urguell

- Gravity **13.3 BLG**
- ABV ---
- IBU **30**
- SRM **5.2**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **36 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**
- Temp **52 C**, Time **15 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **36 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (71.4%)	81 %	4
Grain	Monachijski	1 kg (14.3%)	80 %	16
Grain	kasza jęczmienna	1 kg (14.3%)	60 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	50 g	60 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	30 g	30 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	20 g	10 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale