# 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**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg <i>(71.4%)</i>	81 %	4
Grain	Monachijski	1 kg <i>(14.3%)</i>	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	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale