

Urquell

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **31**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.4 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (82.6%)	81 %	4
Grain	Strzegom Wiedeński	0.5 kg (9.2%)	79 %	10
Grain	Monachijski	0.2 kg (3.7%)	80 %	16
Grain	Strzegom Karmel 30	0.25 kg (4.6%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	30 g	60 min	8 %
Boil	Premiant	20 g	15 min	8 %