

# 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 %        |