

# Ślubny pils

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **38**
- SRM **3.1**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **37.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **70 C**, Time **30 min**

## Mash step by step

- Heat up **16.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **25 min** at **64C**
- Keep mash **30 min** at **70C**
- Sparge using **26.6 liter(s)** of **76C** water or to achieve **37.4 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount          | Yield  | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 5.25 kg (96.3%) | 85 %   | 4   |
| Grain | Chit Malt              | 0.1 kg (1.8%)   | 50 %   | 2   |
| Grain | Acid Malt              | 0.1 kg (1.8%)   | 58.7 % | 6   |

## Hops

| Use for             | Name                 | Amount | Time   | Alpha acid |
|---------------------|----------------------|--------|--------|------------|
| Boil                | Hallertau Tradition  | 50 g   | 60 min | 5 %        |
| Boil                | Tettnang             | 25 g   | 30 min | 4 %        |
| Boil                | Hallertau Mittelfruh | 25 g   | 10 min | 3 %        |
| Mash                | Tettnang             | 25 g   | 5 min  | 4 %        |
| Boil                | Mandarina Bavaria    | 25 g   | 15 min | 8.9 %      |
| Aroma (end of boil) | Mandarina Bavaria    | 25 g   | 0 min  | 10 %       |