

## Pils 2018

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **44**
- SRM **3.5**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **74 liter(s)**
- Trub loss **5 %**
- Size with trub loss **78.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **89.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **50.4 liter(s)**
- Total mash volume **67.2 liter(s)**

### Steps

- Temp **52 C**, Time **1 min**
- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **76 C**, Time **2 min**

### Mash step by step

- Heat up **50.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **1 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **2 min** at **76C**
- Sparge using **56.3 liter(s)** of **76C** water or to achieve **89.9 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński           | 16 kg (95.2%) | 81 %  | 4   |
| Grain | Weyermann - Carapils | 0.8 kg (4.8%) | 78 %  | 4   |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz (Czech Republic) | 200 g  | 30 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 60 g   | 75 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 100 g  | 85 min | 4.5 %      |

### Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 45 g   | Fermentis  |