

## pils\_spalter\_select

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **53**
- SRM **4.6**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **8 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **51 C**, Time **15 min**
- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **68C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

| Type  | Name                     | Amount     | Yield | EBC |
|-------|--------------------------|------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3 kg (75%) | 81 %  | 5   |
| Grain | Briess - Munich Malt 10L | 1 kg (25%) | 77 %  | 20  |

### Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Hallertau Spalt Select | 15 g   | 5 min  | 6.1 %      |
| Boil    | Hallertau Spalt Select | 15 g   | 15 min | 6.1 %      |
| Boil    | Hallertau Spalt Select | 20 g   | 25 min | 6.1 %      |
| Boil    | Northern Brewer        | 25 g   | 45 min | 9.3 %      |
| Boil    | Premiant               | 15 g   | 45 min | 10.69 %    |

### Yeasts

| Name    | Type  | Form  | Amount | Laboratory |
|---------|-------|-------|--------|------------|
| W 34/70 | Lager | Slant | 200 ml | ---        |