

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 | --- |