

#090 German Pils

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **30**
- SRM **3.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **63 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **70 min** at **63C**
- Keep mash **10 min** at **78C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzniejszy | 4.7 kg (95.9%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.2 kg (4.1%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------------------|--------|--------|------------|
| Boil | Hallertau Mittelfruh | 50 g | 60 min | 3.8 % |
| Boil | Hallertau Mittelfruh | 20 g | 15 min | 3.8 % |
| Boil | Tettnang | 30 g | 15 min | 2.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 500 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------------------|--------|---------|--------|
| Fining | whirfloc T | 1.25 g | Boil | 10 min |
| Other | pożywka dla drożdży Wyeast | 3 g | Boil | 10 min |