

PILS

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **35 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|--------|-----|
| Grain | Pilzneński | 5 kg (79.4%) | 81 % | 4 |
| Grain | Chit Malt | 0.5 kg (7.9%) | 50 % | 2 |
| Grain | BESTMALZ - Best Minich | 0.5 kg (7.9%) | 80.5 % | 16 |
| Grain | Acidulated BESTMALZ | 0.3 kg (4.8%) | 76 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Magnat | 20 g | 65 min | 11.2 % |
| Aroma (end of boil) | Lublin (Lubelski) | 35 g | 10 min | 6 % |
| Aroma (end of boil) | Tradition | 30 g | 5 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 22 g | Fermentis |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 1.25 g | Boil | 15 min |