

[M] Pils

- Gravity **11.7 BLG**
- ABV ---
- IBU **35**
- SRM **4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **22.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **5 min** at **78C**
- Sparge using **29.3 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 7.5 kg (100%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 10 g | 60 min | 10 % |
| Aroma (end of boil) | lunga | 20 g | 15 min | 11 % |
| Aroma (end of boil) | Marynka | 20 g | 15 min | 10 % |
| Aroma (end of boil) | Sybilla | 20 g | 15 min | 3.5 % |
| Aroma (end of boil) | lunga | 30 g | 5 min | 11 % |
| Aroma (end of boil) | Marynka | 30 g | 5 min | 10 % |
| Aroma (end of boil) | Sybilla | 30 g | 5 min | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 200 ml | Fermentum Mobile |