

Pils 1.5

- Gravity **12.4 BLG**
- ABV ---
- IBU **43**
- SRM **4.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **36.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński | 6 kg (90.6%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.5 kg (7.6%) | 78 % | 4 |
| Grain | Acid Malt | 0.12 kg (1.8%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 42 g | 60 min | 9.5 % |
| Boil | Lublin (Lubelski) | 25 g | 30 min | 4 % |
| Boil | Lublin (Lubelski) | 20 g | 15 min | 4 % |
| Boil | Saaz | 60 g | 0 min | 4.12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM30 Bohemska rapsodia | Lager | Liquid | 125 ml | Fermentum Mobile |