

## Pils 1.5

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- 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 |