

## #16 Pils

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **39**
- SRM **5.3**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **27.8 liter(s)**
- Trub loss **2 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **32.1 liter(s)**

### Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **32.1 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński   | 2.3 kg (31.5%) | 79 %  | 10  |
| Grain | Best Ale Crisp       | 2 kg (27.4%)   | 82 %  | 6   |
| Grain | Pszeniczny           | 0.5 kg (6.8%)  | 85 %  | 4   |
| Grain | Viking Pale Ale malt | 2 kg (27.4%)   | 80 %  | 5   |
| Grain | Strzegom Pilzneński  | 0.5 kg (6.8%)  | 80 %  | 4   |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Marynka               | 35 g   | 50 min | 10 %       |
| Boil    | Citra                 | 10 g   | 10 min | 12 %       |
| Boil    | Saaz (Czech Republic) | 40 g   | 15 min | 4.5 %      |

### Yeasts

| Name         | Type  | Form | Amount | Laboratory |
|--------------|-------|------|--------|------------|
| Safale US-05 | Lager | Dry  | 11 g   | ---        |