

Pale Ale

- Gravity **10.8 BLG**
- ABV ---
- IBU **36**
- SRM **9.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **17.9 liter(s)**

Steps

- Temp **68 C**, Time **0 min**
- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|--------|-----|
| Grain | Pilzneński | 2.4 kg (63.2%) | 81 % | 4 |
| Grain | Weyermann - Pale Ale Malt | 0.8 kg (21.1%) | 85 % | 7 |
| Grain | Carahell | 0.2 kg (5.3%) | 77 % | 26 |
| Grain | Caramunich Malt | 0.4 kg (10.5%) | 71.7 % | 110 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | Marynka | 26 g | 60 min | 10 % |
| Boil | Kent Goldings | 5 g | 20 min | 5.5 % |
| Boil | Kent Goldings | 10 g | 5 min | 5.5 % |
| Boil | Kent Goldings | 10 g | 0 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|------|-------|--------|-------------|
| Wyeast - London Ale | Ale | Slant | 200 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 15 min |