

## Pale Ale #3

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **26**
- SRM **4.1**
- Style **Blonde Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 4 kg (88.9%)   | 82 %  | 4   |
| Grain | Carahell            | 0.5 kg (11.1%) | 77 %  | 26  |

### Hops

| Use for   | Name    | Amount | Time   | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil      | Marynka | 30 g   | 60 min | 8.2 %      |
| Whirlpool | Fuggles | 90 g   | 0 min  | 4.5 %      |

### Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale K-97 | Ale  | Slant | 200 ml | Fermentis  |