

## Belgian Pale Ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **30**
- SRM **6**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.4 kg (77.3%) | 80 %  | 5   |
| Grain | Abbey Malt Weyermann | 0.4 kg (9.1%)  | 75 %  | 45  |
| Grain | Monachijski          | 0.4 kg (9.1%)  | 80 %  | 16  |
| Grain | Melanoiden Malt      | 0.2 kg (4.5%)  | 80 %  | 39  |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz (Czech Republic) | 45 g   | 60 min | 4.5 %      |
| Boil    | Styrian Golding       | 30 g   | 15 min | 3.6 %      |

### Yeasts

| Name             | Type | Form  | Amount | Laboratory       |
|------------------|------|-------|--------|------------------|
| FM28 Habit opata | Ale  | Slant | 200 ml | Fermentum Mobile |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |         |     |      |       |
|-------|---------|-----|------|-------|
| Spice | Aframon | 6 g | Boil | 5 min |
|-------|---------|-----|------|-------|