

## BPA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **23**
- SRM **5.6**
- Style **Belgian Pale 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 **20 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Pale Ale                   | 3 kg (68.2%)  | 80 %  | 4   |
| Grain | Pilzneński                 | 1 kg (22.7%)  | 81 %  | 4   |
| Grain | Pszeniczny                 | 0.2 kg (4.5%) | 85 %  | 4   |
| Grain | Crystal 150 Castle Malting | 0.2 kg (4.5%) | --- % | 150 |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Iunga                 | 20 g   | 50 min | 9.5 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 5 min  | 4.5 %      |

### Yeasts

| Name                     | Type | Form | Amount | Laboratory |
|--------------------------|------|------|--------|------------|
| Fermentis Safbrew BE-256 | Ale  | Dry  | 11 g   | ---        |

### Extras

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

|        |             |     |      |       |
|--------|-------------|-----|------|-------|
| Fining | Whirlfloc T | 1 g | Boil | 5 min |
|--------|-------------|-----|------|-------|