

## BPA

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **5.9**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **5 %**
- Size with trub loss **37.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **45.5 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **30.8 liter(s)**
- Total mash volume **39.6 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **30.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **23.5 liter(s)** of **76C** water or to achieve **45.5 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Malteurop MepAle (Pale Ale) | 6 kg (68.2%)  | 85 %  | 5   |
| Grain | Strzegom Monachijski typ I  | 1 kg (11.4%)  | 79 %  | 16  |
| Grain | Abbey Malt Weyermann        | 0.5 kg (5.7%) | 75 %  | 45  |
| Grain | Carabelge                   | 0.5 kg (5.7%) | 80 %  | 30  |
| Grain | Płatki orkiszowe            | 0.3 kg (3.4%) | 85 %  | 3   |
| Grain | Płatki owsiane              | 0.5 kg (5.7%) | 85 %  | 3   |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Premiant | 50 g   | 35 min | 8 %        |
| Boil    | Fuggles  | 20 g   | 15 min | 4.5 %      |

### Yeasts

| Name             | Type | Form  | Amount  | Laboratory       |
|------------------|------|-------|---------|------------------|
| FM28 Habit opata | Ale  | Slant | 1000 ml | Fermentum Mobile |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 10 min |