

## Belgian Pale Ale

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **76**
- SRM **7**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.3 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 3.5 kg (53.8%) | 80 %  | 4   |
| Grain | Żytni                      | 1.5 kg (23.1%) | 85 %  | 8   |
| Grain | Strzegom Monachijski typ I | 1 kg (15.4%)   | 79 %  | 16  |
| Grain | Abbey Malt Weyermann       | 0.25 kg (3.8%) | 75 %  | 45  |
| Grain | Carabelge                  | 0.25 kg (3.8%) | 80 %  | 30  |

### Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Warrior  | 45 g   | 60 min | 15.5 %     |
| Boil      | Palisade | 10 g   | 15 min | 7.5 %      |
| Boil      | Chinook  | 10 g   | 15 min | 13 %       |
| Boil      | Simcoe   | 10 g   | 15 min | 13.2 %     |
| Whirlpool | Palisade | 10 g   | 0 min  | 7.5 %      |
| Whirlpool | Simcoe   | 10 g   | 0 min  | 13.2 %     |
| Whirlpool | Chinook  | 10 g   | 0 min  | 13 %       |
| Whirlpool | Citra    | 10 g   | 0 min  | 12 %       |

|         |        |      |          |        |
|---------|--------|------|----------|--------|
| Dry Hop | Simcoe | 40 g | 4 day(s) | 13.2 % |
| Dry Hop | Citra  | 40 g | 4 day(s) | 12 %   |

## Yeasts

| Name               | Type | Form   | Amount  | Laboratory       |
|--------------------|------|--------|---------|------------------|
| FM20 Białe Walonki | Ale  | Liquid | 1000 ml | Fermentum Mobile |