

BPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **5.5**
- 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 **15 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (60%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1.5 kg (30%) | 79 % | 10 |
| Grain | Abbey Castle | 0.25 kg (5%) | 80 % | 45 |
| Grain | Strzegom Monachijski typ II | 0.25 kg (5%) | 79 % | 22 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Magnum | 20 g | 60 min | 11 % |
| Boil | Saaz (Czech Republic) | 25 g | 15 min | 4.5 % |
| Boil | Lublin (Lubelski) | 17 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|--------|--------|------------------|
| FM26 Belgijskie Pagórki | Ale | Liquid | 100 ml | Fermentum Mobile |