

Bpa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **5.4**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **55 C**, Time **0 min**
- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **0 min** at **55C**
- Keep mash **10 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|--------------|-------|-----|
| Grain | Pilzneński | 4.5 kg (90%) | 81 % | 4 |
| Grain | Caramunich® typ I | 0.25 kg (5%) | 73 % | 80 |
| Grain | Karmelowy Jasny 30EBC | 0.25 kg (5%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 25 g | 45 min | 8.5 % |
| Aroma (end of boil) | Oktawia | 100 g | 1 min | 9.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------|------|--------|--------|-------------|
| Wyeast - Trappist High Gravity | Ale | Liquid | 100 ml | Wyeast Labs |