

Bez czelna

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **28**
- SRM **4.1**
- Style **Fruit Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (46.3%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (18.5%) | 85 % | 4 |
| Grain | Pilzneński | 0.5 kg (9.3%) | 81 % | 4 |
| Grain | Pszeniczny | 1.4 kg (25.9%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------|------|---------|--------|------------|
| S-04 | Ale | Slant | 30 ml | --- |
| Biotyk | Ale | Culture | 15 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|---------|-------|
| Flavor | Bez | 1.5 g | Boil | 1 min |