

Resztkowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **60**
- SRM **24.8**
- Style **Brown IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (61.1%) | 80 % | 5 |
| Grain | Biscuit Malt | 0.3 kg (4.6%) | 79 % | 45 |
| Grain | Pszeniczny | 0.6 kg (9.2%) | 85 % | 4 |
| Grain | Abbey Malt Weyermann | 0.5 kg (7.6%) | 75 % | 45 |
| Grain | Carahell | 0.25 kg (3.8%) | 77 % | 26 |
| Grain | Caraaroma | 0.3 kg (4.6%) | 78 % | 400 |
| Grain | Barwiący | 0.1 kg (1.5%) | 55 % | 985 |
| Grain | Strzegom pszenica prażona | 0.2 kg (3.1%) | 70 % | 1000 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.3 kg (4.6%) | 79 % | 130 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|-----------|------------|
| Boil | lunga | 50 g | 30 min | 11 % |
| Boil | lunga | 50 g | 15 min | 11 % |
| Dry Hop | Lublin (Lubelski) | 50 g | 10 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |