

Ale

- Gravity **17.7 BLG**
- ABV ---
- IBU **38**
- SRM **11.3**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **78 C**, Time **1 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (88.5%) | 80 % | 5 |
| Grain | Strzegom Karmel 300 | 0.25 kg (4.4%) | 75 % | 300 |
| Grain | Płatki orkiszowe | 0.2 kg (3.5%) | 80 % | 4 |
| Grain | Płatki owsiane | 0.2 kg (3.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | lunga | 15 g | 50 min | 11 % |
| Boil | Marynka | 15 g | 40 min | 10 % |
| Boil | Lublin (Lubelski) | 20 g | 15 min | 4 % |
| Dry Hop | Lublin (Lubelski) | 30 g | 5 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | Safale |