

Nic

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **39**
- SRM **3**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.9 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **70 C**, Time **45 min**

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **70C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.7 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Magnum | 25 g | 60 min | 13.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g | 5 min | 4 % |

Yeasts

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