

Pale Lager

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **44**
- SRM **3.5**
- Style **Bohemian Pilsener**

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 **7 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Iunga | 20 g | 40 min | 11 % |
| Boil | Saaz (Czech Republic) | 20 g | 40 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 40 g | 20 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 40 g | 0 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|-------|-------|--------|------------|
| w-34/70-gęstwa | Lager | Slant | 150 ml | --- |