

Pale Ale Dry Hopped

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **4**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

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

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Magnum | 20 g | 60 min | 10.6 % |
| Aroma (end of boil) | Lubelski | 20 g | 5 min | 3.8 % |
| Aroma (end of boil) | Sladdek | 30 g | 5 min | 6.2 % |
| Aroma (end of boil) | Premiant | 30 g | 5 min | 8.2 % |
| Dry Hop | Lubelski | 20 g | 5 day(s) | 3.8 % |
| Dry Hop | Sladdek | 20 g | 5 day(s) | 6.2 % |
| Dry Hop | Premiant | 20 g | 5 day(s) | 8.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale | Dry | 11.5 g | Fermentis |