

Pale Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **44**
- SRM **8.4**
- Style **American Pale Ale**

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 **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (54.7%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 1.2 kg (18.7%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (15.6%) | 79 % | 16 |
| Grain | Viking Wheat Malt | 0.5 kg (7.8%) | 83 % | 5 |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.1%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Chinook | 25 g | 60 min | 12.8 % |
| Boil | Ariana | 30 g | 15 min | 12.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale | Slant | 100 ml | --- |