

Czapa

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **34**
- SRM **7.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **15 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **77C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (90.9%) | 80 % | 5 |
| Grain | Cara Gold | 0.5 kg (9.1%) | 75 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 13.5 % |
| Boil | Izabella | 50 g | 15 min | 6.8 % |

Yeasts

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