

Festiwalowe Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **26**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **7 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **7 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.2 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 5 g | 60 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 5 g | 15 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 10 g | 0 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 50 ml | Fermentis |