

topaz

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **1**
- SRM **7.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **32.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **60 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **65C**
- Add grains
- Keep mash **1 min** at **60C**
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **38.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Fawcett - Crystal | 0.5 kg (8.3%) | 70 % | 160 |
| Grain | Golden Promise fawcett | 0.5 kg (8.3%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------------------------|-------|--------|----------|------------|
| First Wort | Topaz | 10 g | 0 min | 15.5 % |
| FWH po wy slodzeniu | | | | |
| Whirlpool | Topaz | 10 g | 4 min | 15.5 % |
| Przy 80stopnisch chłodzenie | | | | |
| Dry Hop | Topaz | 80 g | 4 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 250 ml | Fermentis |