

#23

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **99**
- SRM **4.3**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (59.5%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 1.7 kg (40.5%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Magnum | 30 g | 55 min | 12.1 % |
| Boil | Columbus/Tomahawk/Zeus | 5 g | 55 min | 14.6 % |
| Whirlpool | Amarillo | 25 g | 30 min | 9.5 % |
| Whirlpool | Citra | 25 g | 30 min | 12 % |
| Whirlpool | Simcoe | 25 g | 30 min | 13.2 % |
| Dry Hop | Amarillo | 25 g | 2 day(s) | 9.5 % |
| Dry Hop | Citra | 25 g | 2 day(s) | 12 % |
| Dry Hop | Simcoe | 25 g | 2 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 8 g | Fermentis |