

Classic

- Gravity **12.1 BLG**
- ABV ---
- IBU **39**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **2 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (50%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (33.3%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 1 kg (16.7%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Centennial | 20 g | 60 min | 9.4 % |
| Boil | citra | 20 g | 30 min | 12.5 % |
| Boil | mosaic | 20 g | 5 min | 13.2 % |
| Aroma (end of boil) | Centennial | 30 g | 0 min | 9.4 % |
| Aroma (end of boil) | citra | 30 g | 0 min | 12.5 % |
| Aroma (end of boil) | mosaic | 30 g | 0 min | 13.2 % |
| Dry Hop | simcoe | 100 g | 3 day(s) | 12.9 % |

Yeasts

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