

IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **54**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **71C**
- Keep mash **1 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 4 kg (80%) | 82 % | 4 |
| Grain | Viking Wheat Malt | 0.5 kg (10%) | 83 % | 5 |
| Grain | Viking Munich Malt | 0.35 kg (7%) | 78 % | 18 |
| Grain | Viking caramel malt 100 | 0.1 kg (2%) | --- % | 100 |
| Grain | Caramel 150 | 0.05 kg (1%) | --- % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |
| Aroma (end of boil) | Centennial | 20 g | 10 min | 10.5 % |
| Aroma (end of boil) | Simcoe | 20 g | 5 min | 13.2 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 100 ml | Fermentis |