

Spontan

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **40**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (71.4%) | 80 % | 5 |
| Grain | Bestmalz Carmel Pils | 2 kg (28.6%) | 75 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Marynka | 20 g | 60 min | 6 % |
| Boil | Citra | 15 g | 20 min | 13 % |
| Boil | Amarillo | 15 g | 20 min | 9.5 % |
| Whirlpool | Citra | 35 g | 30 min | 13 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 35 g | 3 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |