

the Butcher v2

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **78**
- SRM **11**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **65.5 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.1C**
- Add grains
- Keep mash **60 min** at **65.5C**
- Keep mash **5 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (98%) | 80 % | 5 |
| Grain | Carafa III | 0.1 kg (2%) | 70 % | 1034 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 10 g | 60 min | 15.5 % |
| Boil | Citra | 15 g | 30 min | 12 % |
| Boil | Simcoe | 15 g | 30 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 15 g | 15 min | 9.5 % |
| Aroma (end of boil) | Simcoe | 15 g | 15 min | 13.2 % |
| Aroma (end of boil) | Citra | 15 g | 15 min | 12 % |
| Dry Hop | Citra | 50 g | 7 day(s) | 12 % |
| Dry Hop | Simcoe | 15 g | 7 day(s) | 13.2 % |
| Dry Hop | Amarillo | 23 g | 7 day(s) | 9.5 % |

Yeasts

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