

ipa

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **45**
- SRM **7.3**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5.5 kg (78.6%) | 80 % | 5 |
| Grain | Carahell | 1.5 kg (21.4%) | 77 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | Nugget | 30 g | 60 min | 13.8 % |
| Boil | Nugget | 10 g | 15 min | 13.8 % |
| Aroma (end of boil) | Nugget | 20 g | 1 min | 13.8 % |
| Dry Hop | Nugget | 30 g | 3 day(s) | 13.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us05 | Ale | Dry | 11.5 g | --- |