

zacier1

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **83**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **11.5 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 (80.6%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 1 kg (16.1%) | 82 % | 4 |
| Sugar | Corn Sugar (Dextrose) | 0.2 kg (3.2%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | lunga | 40 g | 60 min | 11 % |
| Boil | lunga | 30 g | 30 min | 11 % |
| Boil | Mandarina Bavaria | 10 g | 15 min | 10 % |
| Boil | Citra | 10 g | 15 min | 12 % |
| Aroma (end of boil) | Citra | 10 g | 5 min | 12 % |
| Aroma (end of boil) | Mandarina Bavaria | 30 g | 0 min | 10 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |
| Dry Hop | Citra | 30 g | --- | 12 % |
| Dry Hop | Mandarina Bavaria | 60 g | --- | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-----|------|-----------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |
|--------------|-----|-----|------|-----------|