

red ipa a'la

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **81**
- SRM **14**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | red activ viking malt | 5 kg (96.2%) | 79 % | 30 |
| Grain | crystal 160 | 0.2 kg (3.8%) | 73 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 18 g | 60 min | 15.5 % |
| Boil | Citra | 15 g | 30 min | 12 % |
| Boil | Simcoe | 15 g | 30 min | 13.2 % |
| Boil | Amarillo | 15 g | 15 min | 9.5 % |
| Boil | Simcoe | 15 g | 15 min | 13.2 % |
| Dry Hop | Citra | 50 g | 7 day(s) | 12 % |
| Dry Hop | Simcoe | 50 g | 7 day(s) | 13.2 % |
| Dry Hop | Amarillo | 30 g | 7 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| FM 52 | Ale | Slant | 300 ml | Fermentum |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | whirfloc | 5 g | Boil | 15 min |