

Red IPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **29**
- SRM **8.4**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.2 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **17.3 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 | 2.5 kg (43.4%) | 80 % | 2 |
| Grain | Pilzniejszy | 1 kg (17.4%) | 81 % | 4 |
| Grain | Weyermann - Caraamber | 1 kg (17.4%) | 75 % | 65 |
| Grain | Viking karmelowy czerwony malt | 0.38 kg (6.6%) | 60 % | 45 |
| Grain | Viking Cookie | 0.28 kg (4.9%) | 79 % | 45 |
| Grain | Viking Wheat Malt | 0.6 kg (10.4%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Cascade PL | 30 g | 60 min | 6.1 % |
| Aroma (end of boil) | Cascade PL | 30 g | 10 min | 6.1 % |
| Dry Hop | Galaxy | 30 g | 4 day(s) | 15 % |
| Whirlpool | Cascade PL | 40 g | 20 min | 6.1 % |

Yeasts

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

| | | | | |
|-------|-----|-----|--------|-----------|
| us-05 | Ale | Dry | 11.5 g | fermentis |
|-------|-----|-----|--------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | whirfloc | 2.5 g | Boil | 10 min |