

## 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 | Pilzneński                     | 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 |