

## echo 'Hello World'

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **24**
- SRM **4.5**
- Style **Weizen/Weissbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **45 min** at **63C**
- Keep mash **20 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount     | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Wheat Malt    | 2 kg (40%) | 83 %  | 5   |
| Grain | Viking Vienna Malt   | 2 kg (40%) | 79 %  | 7   |
| Grain | Viking Pale Ale malt | 1 kg (20%) | 80 %  | 5   |

### Hops

| Use for | Name             | Amount | Time   | Alpha acid |
|---------|------------------|--------|--------|------------|
| Boil    | Cascade          | 15 g   | 60 min | 6 %        |
| Boil    | Cascade          | 10 g   | 40 min | 6 %        |
| Boil    | Simcoe           | 25 g   | 5 min  | 13.2 %     |
| Boil    | Owoce Jałowca    | 15 g   | 10 min | 1 %        |
| Boil    | Skórka cytrynowa | 20 g   | 10 min | 1 %        |