

# Witbier prosty + czerwona porzeczka

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **17**
- SRM **3.1**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **6 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 1.5 kg (75%) | 82 %  | 4   |
| Grain | Płatki pszeniczne   | 0.5 kg (25%) | 85 %  | 3   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Crystal | 7.5 g  | 60 min | 4.9 %      |
| Aroma (end of boil) | Simcoe  | 7.5 g  | 10 min | 13.3 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 5.75 g | Safale     |

## Extras

| Type   | Name                             | Amount | Use for | Time   |
|--------|----------------------------------|--------|---------|--------|
| Flavor | sucha skórka cytryny             | 15 g   | Boil    | 10 min |
| Flavor | sucha skórka gorzkiej pomarańczy | 15 g   | Boil    | 10 min |

|        |                                     |        |           |           |
|--------|-------------------------------------|--------|-----------|-----------|
| Flavor | sucha skórka<br>słodkiej pomarańczy | 15 g   | Boil      | 10 min    |
| Spice  | kolendra                            | 10 g   | Boil      | 10 min    |
| Spice  | jałowiec                            | 5 g    | Boil      | 10 min    |
| Flavor | Czarna porzeczka                    | 1000 g | Secondary | 14 day(s) |