

# Witbier mocna pomarańcza

- Gravity **10 BLG**
- ABV **4 %**
- IBU **11**
- SRM **3.1**
- Style **Witbier**

## 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 **4.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **3 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **55.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                                      | Amount     | Yield | EBC |
|-------|---|------------|-------|-----|
| Grain | Słód Pilsner®<br>2,5-4,5 EBC<br>Weyermann | 3 kg (75%) | 80 %  | 4   |
| Grain | Pszenica<br>niesłodowana                  | 1 kg (25%) | 75 %  | 3   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 50 g   | 15 min | 3.8 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | Kolendra | 15 g   | Boil    | 10 min |
| Spice | Curacao  | 20 g   | Boil    | 10 min |

|       |                            |       |      |        |
|-------|----------------------------|-------|------|--------|
| Other | łuska ryżowa               | 100 g | Mash | ---    |
| Spice | Skórka słodkiej pomarańczy | 160 g | Boil | 10 min |