

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® 2,5-4,5 EBC Weyermann | 3 kg (75%) | 80 % | 4 |
| Grain | Pszenica 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 |