

## Witbir tatarzy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **12**
- SRM **4.6**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.4 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilznieński       | 3 kg (51.7%)   | 81 %  | 4   |
| Grain | pszeniczny        | 0.8 kg (13.8%) | 80 %  | 16  |
| Grain | Płatki pszeniczne | 2 kg (34.5%)   | 60 %  | 3   |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 10 g   | 60 min | 11 %       |

### Yeasts

| Name                            | Type  | Form | Amount | Laboratory      |
|---------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M21 Belgian Wit | Wheat | Dry  | 22 g   | Mangrove Jack's |

### Extras

| Type  | Name     | Amount | Use for | Time  |
|-------|----------|--------|---------|-------|
| Spice | kolendra | 7 g    | Boil    | 5 min |
| Spice | curacao  | 25 g   | Boil    | 5 min |