

## Witbier

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **18**
- SRM **3.2**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **24.7 liter(s)**
- Total mash volume **30.2 liter(s)**

### Steps

- Temp **65 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **24.7 liter(s)** of strike water to **70C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount         | Yield  | EBC |
|-------|-------------------|----------------|--------|-----|
| Grain | Heidelberg        | 2.5 kg (45.5%) | 80.5 % | 2.5 |
| Grain | Płatki pszeniczne | 1.8 kg (32.7%) | 85 %   | 3.5 |
| Grain | Płatki owsiane    | 0.35 kg (6.4%) | 85 %   | 3   |
| Grain | Wheat, Torrified  | 0.3 kg (5.5%)  | 79 %   | 6   |
| Grain | Słód diastatyczny | 0.3 kg (5.5%)  | 80 %   | 3   |
| Grain | Acid Malt         | 0.25 kg (4.5%) | --- %  | 4.5 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Olicana | 20 g   | 60 min | 6.9 %      |
| Boil    | Olicana | 20 g   | 10 min | 6.9 %      |
| Boil    | Olicana | 10 g   | 0 min  | 6.9 %      |

### Yeasts

| Name               | Type  | Form   | Amount | Laboratory       |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 35 ml  | Fermentum Mobile |

### Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type   | Name                       | Amount | Use for | Time   |
|--------|----------------------------|--------|---------|--------|
| Spice  | Kolendra                   | 5 g    | Boil    | 15 min |
| Other  | Pożywka dla drożdży        | 10 g   | Boil    | 15 min |
| Flavor | Zest z cytrusów            | 240 g  | Boil    | 15 min |
| Flavor | Skórka gorzkiej pomarańczy | 20 g   | Boil    | 15 min |
| Fining | Whirfloc                   | 2 g    | Boil    | 10 min |
| Spice  | Kolendra                   | 5 g    | Boil    | 5 min  |
| Spice  | Kardamon                   | 3 g    | Boil    | 5 min  |