

## Wtbier festiwal

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **16**
- SRM **3.7**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.1 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20.5 liter(s)**

### Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **59.9C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

### Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński      | 2 kg (44.9%)   | 80 %  | 4   |
| Grain | Słód pszeniczny Bestmalz | 1 kg (22.5%)   | 82 %  | 5   |
| Grain | Abbey Malt Weyermann     | 0.15 kg (3.4%) | 75 %  | 45  |
| Grain | Płatki pszeniczne        | 0.8 kg (18%)   | 85 %  | 3   |
| Grain | Płatki owsiane           | 0.5 kg (11.2%) | 85 %  | 3   |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 13 g   | 60 min | 10 %       |
| Boil    | Marynka | 13 g   | 5 min  | 10 %       |

### Yeasts

| Name               | Type  | Form   | Amount | Laboratory       |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 200 ml | Fermentum Mobile |

### Extras

| Type  | Name                         | Amount | Use for | Time  |
|-------|------------------------------|--------|---------|-------|
| Spice | skórka pomarańcze<br>curasao | 20 g   | Boil    | 5 min |
| Spice | kolendra                     | 15 g   | Boil    | 5 min |